

10/810211

=> file registry

FILE 'REGISTRY' ENTERED AT 11:05:21 ON 28 AUG 2009

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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 26 AUG 2009 HIGHEST RN 1176333-21-3

DICTIONARY FILE UPDATES: 26 AUG 2009 HIGHEST RN 1176333-21-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

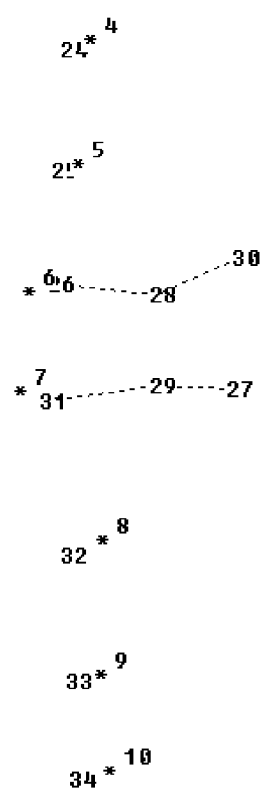
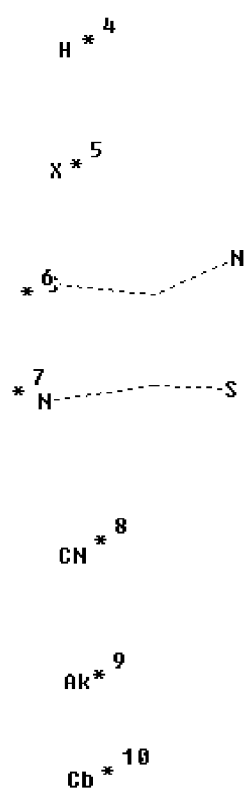
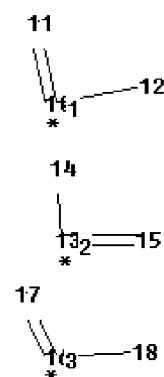
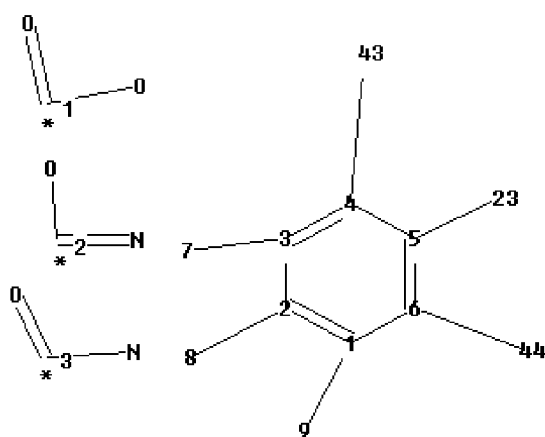
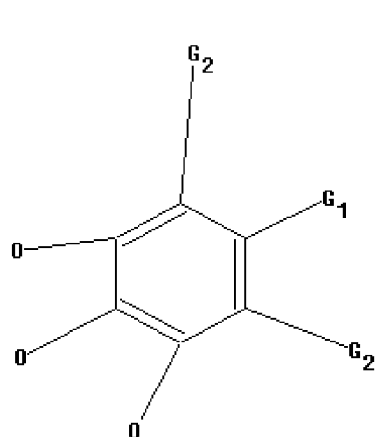
Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

Uploading L1.str

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```

chain nodes :
7  8  9  10  11  12  13  14  15  16  17  18  23  24  25  26  27  28  29  30  31
32  33  34  43  44
ring nodes :
1  2  3  4  5  6
chain bonds :
1-9  2-8  3-7  4-43  5-23  6-44  10-11  10-12  13-14  13-15  16-17  16-18  26-28
27-29  28-30  29-31
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6
exact/norm bonds :
1-9  2-8  3-7  4-43  5-23  6-44  10-11  10-12  13-14  13-15  16-17  16-18  26-28
27-29  28-30  29-31
normalized bonds :

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1-2 1-6 2-3 3-4 4-5 5-6

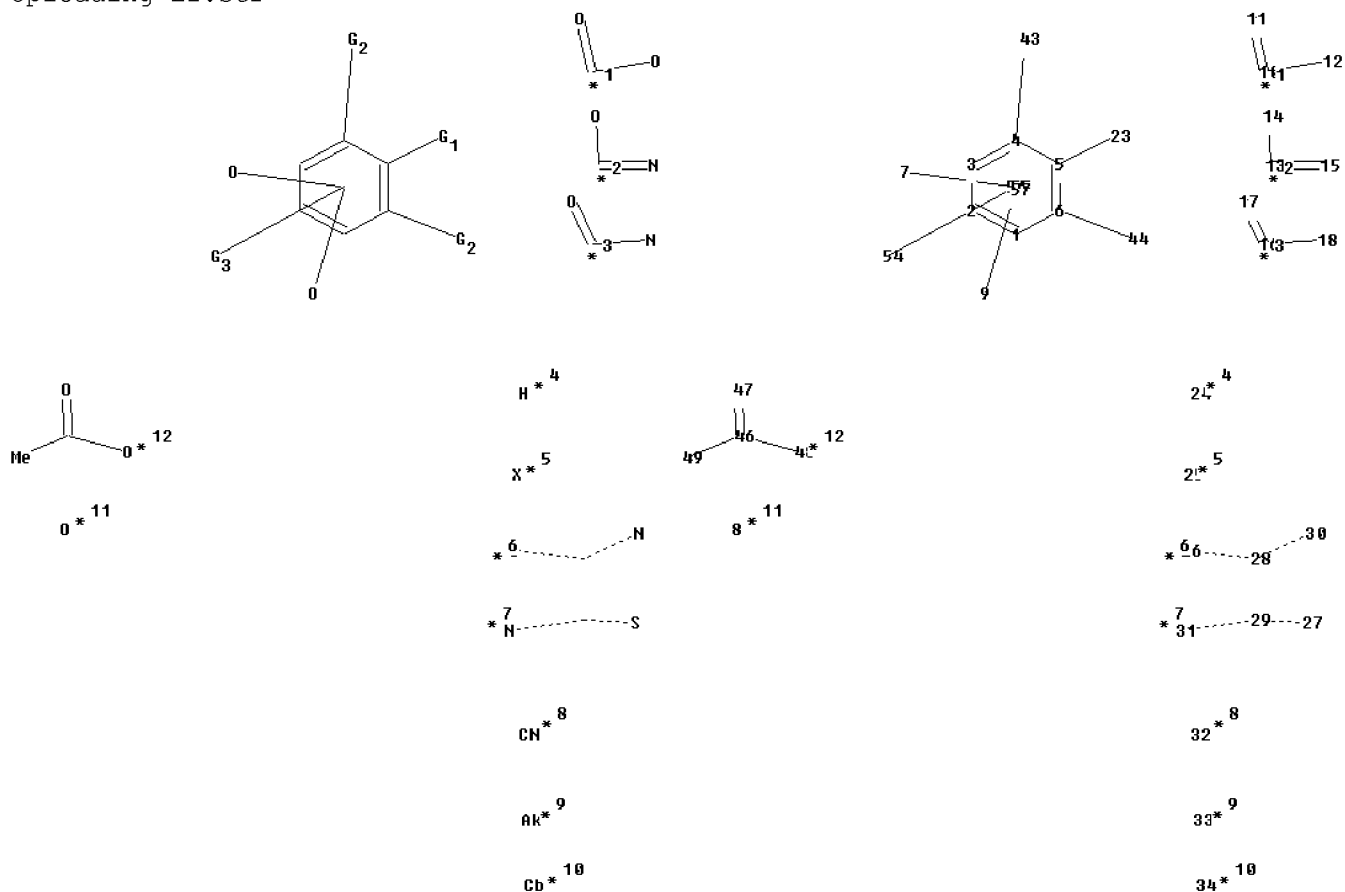
G1:[*1],[*2],[*3]

G2:[*4],[*5],[*6],[*7],[*8],[*9],[*10]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
23:CLASS 24:CLASS
25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 34:Atom
43:CLASS 44:CLASS

Uploading L2.str



chain nodes :

7 8 9 10 11 12 13 14 15 16 17 18 23 24 25 26 27 28 29 30 31
32 33 34 43 44 46 47 48 49 54

ring nodes :

1 2 3 4 5 6

chain bonds :

4-43 5-23 6-44 10-11 10-12 13-14 13-15 16-17 16-18 26-28 27-29 28-30
29-31 46-47 46-48 46-49

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds :

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4-43 5-23 6-44 10-11 10-12 13-14 13-15 16-17 16-18 26-28 27-29 28-30
29-31 46-47 46-48
exact bonds :
46-49
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

G1:[*1],[*2],[*3]

G2:[*4],[*5],[*6],[*7],[*8],[*9],[*10]

G3:[*11],[*12]

Connectivity :

8:1 E exact RC ring/chain

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
23:CLASS 24:CLASS
25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 34:Atom
43:CLASS 44:CLASS 46:CLASS 47:CLASS 48:CLASS 49:CLASS 54:CLASS 55:CLASS
56:CLASS 57:CLASS

=> file zcaplus

FILE 'ZCAPLUS' ENTERED AT 11:05:23 ON 28 AUG 2009

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 28 Aug 2009 VOL 151 ISS 10

FILE LAST UPDATED: 27 Aug 2009 (20090827/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

ZCaplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

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The ALL, BIB, MAX, and STD display formats in the CA/CaPlus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.

'OBI' IS DEFAULT SEARCH FIELD FOR 'ZCAPLUS' FILE

=> d stat que L28

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L2 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L5 6619 SEA FILE=REGISTRY SSS FUL L1 AND L2

L6 26435 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L5

L20 959 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ?SAFENER?/BI

L28 2 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L6 AND L20

=> d stat que L31

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L2 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L5 6619 SEA FILE=REGISTRY SSS FUL L1 AND L2

L6 26435 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L5

L22 7342 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ?ANTIDOTE?/BI

L23 353363 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON 5/CC, SX, SC

L30 15 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L6 AND L22

L31 3 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L30 AND L23

=> d stat que L59

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L2 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L5 6619 SEA FILE=REGISTRY SSS FUL L1 AND L2

L6 26435 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L5

L8 4 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (1132-21-4/BI OR
141112-29-0/BI OR 173159-57-4/BI OR 530-57-4/BI)

L9 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 141112-29-0

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L10      1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  173159-57-4
L11      2 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  (L9 OR L10)
L12     1573854 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?PLANT?/BI
L13      374345 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?SEED?/BI
L14      222949 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?PROPAGAT?/BI
L15       95842 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?HERBICID?/BI
L16      610849 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?ICID?/BI
L17      13955 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?BIOCID?/BI
L18      67493 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  AGRO?/BI
L19      99601 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  AGRI?/BI
L21      63339 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?ADJUVANT?/BI
L23      353363 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  5/CC, SX, SC
L24       462 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L11
L25       298 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?PHYTOCID?/BI
L26      25907 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  WEED CONTROL?/BI
L27       268 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  WEEDICID?/BI
L32       5730 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L6 AND ((L12 OR L13
OR L14 OR L15 OR L16 OR L17 OR L18 OR L19) OR L21 OR (L23 OR
L24 OR L25 OR L26 OR L27))
L33      1295 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L32 AND P/DT
L34      4435 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L32 NOT L33
L36       635 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L33 AND PRD<20030326
L37       620 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L33 AND AD<20030326
L38       541 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L33 AND PD<20030326
L41       1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L8 AND 5/O
L43      136 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L5 (L) AGR/RL
L44       95 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L43 AND P/DT
L45       41 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L43 NOT L44
L47       41 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L44 AND PRD<20030326
L48       30 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L44 AND PD<20030326
L49       41 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L44 AND AD<20030326
L54      2709 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L34 AND PY<2003
L55      3379 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L54 OR (L36 OR L37 OR
L38)
L56       17 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L45 AND PY<2003
L57       58 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L56 OR (L47 OR L48 OR
L49)
L58      3381 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L55 OR L57
L59       12 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L58 AND (L41 (L)
AGR/RL)
```

=> d stat que L81

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L2 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L5 6619 SEA FILE=REGISTRY SSS FUL L1 AND L2

L6 26435 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L5

L8 4 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (1132-21-4/BI OR
141112-29-0/BI OR 173159-57-4/BI OR 530-57-4/BI)

L9 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 141112-29-0

L10 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 173159-57-4

L11 2 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (L9 OR L10)

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L12	1573854	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	?PLANT?/BI
L13	374345	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	?SEED?/BI
L14	222949	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	?PROPAGAT?/BI
L15	95842	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	?HERBICID?/BI
L16	610849	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	?ICID?/BI
L17	13955	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	?BIOCID?/BI
L18	67493	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	AGRO?/BI
L19	99601	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	AGRI?/BI
L21	63339	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	?ADJUVANT?/BI
L23	353363	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	5/CC, SX, SC
L24	462	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L11
L25	298	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	?PHYTOCID?/BI
L26	25907	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	WEED CONTROL?/BI
L27	268	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	WEEDICID?/BI
L32	5730	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L6 AND ((L12 OR L13 OR L14 OR L15 OR L16 OR L17 OR L18 OR L19) OR L21 OR (L23 OR L24 OR L25 OR L26 OR L27))
L33	1295	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L32 AND P/DT
L34	4435	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L32 NOT L33
L36	635	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L33 AND PRD<20030326
L37	620	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L33 AND AD<20030326
L38	541	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L33 AND PD<20030326
L41	1	SEA	FILE=REGISTRY	SPE=ON	ABB=ON	PLU=ON	L8 AND 5/O
L43	136	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L5 (L) AGR/RL
L44	95	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L43 AND P/DT
L45	41	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L43 NOT L44
L47	41	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L44 AND PRD<20030326
L48	30	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L44 AND PD<20030326
L49	41	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L44 AND AD<20030326
L54	2709	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L34 AND PY<2003
L55	3379	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L54 OR (L36 OR L37 OR L38)
L56	17	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L45 AND PY<2003
L57	58	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L56 OR (L47 OR L48 OR L49)
L58	3381	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L55 OR L57
L62	39073	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	ZEAMAYS?/BI
L63	31320	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	TRITICUM AESTIVUM/BI
L64	18095	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	SORGHUM/BI
L65	4291	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	SECALE CEREALE/BI
L66	5269	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	PANICUM/BI
L67	16049	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	HORDEUM VULGARE/BI
L68	2362	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	FAGOPYRUM ESCULENTUM/B I
L69	47260	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	CEREAL?/BI
L70	57166	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	BARLEY?/BI
L71	24491	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	BRAN/BI
L72	143166	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	CORN/BI
L73	45485	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	ORYZA SATIVA/BI
L74	118899	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	RICE/BI
L75	130626	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	COTTON/BI
L76	139287	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	SOYBEAN?/BI
L77	390	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L58 AND (L62 OR L63 OR L64 OR L65 OR L66 OR L67 OR L68 OR L69 OR L70 OR L71 OR L72 OR L73 OR L74 OR L75 OR L76)
L79	300	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L41 (L) USES/RL
L80	8	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L77 AND L79
L81	2	SEA	FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L80 AND L23

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=> d stat que L82

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L2 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L5 6619 SEA FILE=REGISTRY SSS FUL L1 AND L2
L6 26435 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L5
L8 4 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (1132-21-4/BI OR
141112-29-0/BI OR 173159-57-4/BI OR 530-57-4/BI)
L9 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 141112-29-0
L10 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 173159-57-4
L11 2 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (L9 OR L10)
L12 1573854 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ?PLANT?/BI
L13 374345 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ?SEED?/BI
L14 222949 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ?PROPAGAT?/BI
L15 95842 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ?HERBICID?/BI
L16 610849 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ?ICID?/BI
L17 13955 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ?BIOCID?/BI
L18 67493 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON AGRO?/BI
L19 99601 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON AGRI?/BI
L21 63339 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ?ADJUVANT?/BI
L23 353363 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON 5/CC, SX, SC
L24 462 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L11
L25 298 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ?PHYTOCID?/BI
L26 25907 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON WEED CONTROL?/BI
L27 268 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON WEEDICID?/BI
L32 5730 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L6 AND ((L12 OR L13
OR L14 OR L15 OR L16 OR L17 OR L18 OR L19) OR L21 OR (L23 OR
L24 OR L25 OR L26 OR L27))
L33 1295 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L32 AND P/DT
L34 4435 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L32 NOT L33
L36 635 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L33 AND PRD<20030326
L37 620 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L33 AND AD<20030326
L38 541 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L33 AND PD<20030326
L41 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L8 AND 5/O
L43 136 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L5 (L) AGR/RL
L44 95 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L43 AND P/DT
L45 41 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L43 NOT L44
L47 41 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L44 AND PRD<20030326
L48 30 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L44 AND PD<20030326
L49 41 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L44 AND AD<20030326
L54 2709 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L34 AND PY<2003
L55 3379 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L54 OR (L36 OR L37 OR
L38)
L56 17 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L45 AND PY<2003
L57 58 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L56 OR (L47 OR L48 OR
L49)
L58 3381 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON L55 OR L57
L62 39073 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON ZEA MAYS?/BI
L63 31320 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON TRITICUM AESTIVUM/BI
L64 18095 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON SORGHUM/BI
L65 4291 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON SECALE CEREALE/BI
L66 5269 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON PANICUM/BI
L67 16049 SEA FILE=ZCAPLUS SPE=ON ABB=ON PLU=ON HORDEUM VULGARE/BI

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L68      2362 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  FAGOPYRUM ESCULENTUM/B
          I
L69      47260 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  CEREAL?/BI
L70      57166 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  BARLEY?/BI
L71      24491 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  BRAN/BI
L72      143166 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  CORN/BI
L73      45485 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ORYZA SATIVA/BI
L74      118899 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  RICE/BI
L75      130626 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  COTTON/BI
L76      139287 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  SOYBEAN?/BI
L77      390 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L58 AND (L62 OR L63
          OR L64 OR L65 OR L66 OR L67 OR L68 OR L69 OR L70 OR L71 OR L72
          OR L73 OR L74 OR L75 OR L76)
L79      300 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L41 (L) USES/RL
L80      8 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L77 AND L79
L82      3 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L80 AND 3/CC

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L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Expressquery preparation.

L2 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

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L5      6619 SEA FILE=REGISTRY SSS FUL L1 AND L2
L6      26435 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L5
L9      1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  141112-29-0
L10     1 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  173159-57-4
L11     2 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  (L9 OR L10)
L12     1573854 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?PLANT?/BI
L13     374345 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?SEED?/BI
L14     222949 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?PROPAGAT?/BI
L15     95842 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?HERBICID?/BI
L16     610849 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?ICID?/BI
L17     13955 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?BIOCID?/BI
L18     67493 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  AGRO?/BI
L19     99601 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  AGRI?/BI
L21     63339 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?ADJUVANT?/BI
L23     353363 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  5/CC, SX, SC
L24     462 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L11
L25     298 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  ?PHYTOCID?/BI
L26     25907 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  WEED CONTROL?/BI
L27     268 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  WEEDICID?/BI
L32     5730 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L6 AND ((L12 OR L13
          OR L14 OR L15 OR L16 OR L17 OR L18 OR L19) OR L21 OR (L23 OR
          L24 OR L25 OR L26 OR L27))
L33     1295 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L32 AND P/DT
L34     4435 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L32 NOT L33
L36     635 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L33 AND PRD<20030326
L37     620 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L33 AND AD<20030326
L38     541 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L33 AND PD<20030326
L43     136 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L5 (L) AGR/RL
L44     95 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L43 AND P/DT
L45     41 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L43 NOT L44
L47     41 SEA FILE=ZCAPLUS SPE=ON  ABB=ON  PLU=ON  L44 AND PRD<20030326

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L48	30	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L44 AND PD<20030326
L49	41	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L44 AND AD<20030326
L54	2709	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L34 AND PY<2003
L55	3379	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L54 OR (L36 OR L37 OR L38)
L56	17	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L45 AND PY<2003
L57	58	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L56 OR (L47 OR L48 OR L49)
L58	3381	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L55 OR L57
L62	39073	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	ZEA MAYS?/BI
L63	31320	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	TRITICUM AESTIVUM/BI
L64	18095	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	SORGHUM/BI
L65	4291	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	SECALE CEREALE/BI
L66	5269	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	PANICUM/BI
L67	16049	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	HORDEUM VULGARE/BI
L68	2362	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	FAGOPYRUM ESCULENTUM/B
		I				
L69	47260	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	CEREAL?/BI
L70	57166	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	BARLEY?/BI
L71	24491	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	BRAN/BI
L72	143166	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	CORN/BI
L73	45485	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	ORYZA SATIVA/BI
L74	118899	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	RICE/BI
L75	130626	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	COTTON/BI
L76	139287	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	SOYBEAN?/BI
L77	390	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L58 AND (L62 OR L63 OR L64 OR L65 OR L66 OR L67 OR L68 OR L69 OR L70 OR L71 OR L72 OR L73 OR L74 OR L75 OR L76)
L83	9058	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L5 (L) USES/RL
L84	89	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L83 AND L77
L85	10	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L84 AND L23

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L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L2 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L5	6619	SEA FILE=REGISTRY	SSS FUL	L1 AND L2
L6	26435	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON PLU=ON L5
L9	1	SEA FILE=REGISTRY	SPE=ON	ABB=ON PLU=ON 141112-29-0
L10	1	SEA FILE=REGISTRY	SPE=ON	ABB=ON PLU=ON 173159-57-4
L11	2	SEA FILE=REGISTRY	SPE=ON	ABB=ON PLU=ON (L9 OR L10)
L12	1573854	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON PLU=ON ?PLANT?/BI
L13	374345	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON PLU=ON ?SEED?/BI
L14	222949	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON PLU=ON ?PROPAGAT?/BI
L15	95842	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON PLU=ON ?HERBICID?/BI
L16	610849	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON PLU=ON ?ICID?/BI
L17	13955	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON PLU=ON ?BIOCID?/BI
L18	67493	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON PLU=ON AGRO?/BI
L19	99601	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON PLU=ON AGRI?/BI
L21	63339	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON PLU=ON ?ADJUVANT?/BI
L23	353363	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON PLU=ON 5/CC, SX, SC
L24	462	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON PLU=ON L11

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L25	298	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	?PHYTOCID?/BI
L26	25907	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	WEED CONTROL?/BI
L27	268	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	WEEDICID?/BI
L32	5730	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L6 AND ((L12 OR L13 OR L14 OR L15 OR L16 OR L17 OR L18 OR L19) OR L21 OR (L23 OR L24 OR L25 OR L26 OR L27))
L33	1295	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L32 AND P/DT
L34	4435	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L32 NOT L33
L36	635	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L33 AND PRD<20030326
L37	620	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L33 AND AD<20030326
L38	541	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L33 AND PD<20030326
L43	136	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L5 (L) AGR/RL
L44	95	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L43 AND P/DT
L45	41	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L43 NOT L44
L47	41	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L44 AND PRD<20030326
L48	30	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L44 AND PD<20030326
L49	41	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L44 AND AD<20030326
L54	2709	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L34 AND PY<2003
L55	3379	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L54 OR (L36 OR L37 OR L38)
L56	17	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L45 AND PY<2003
L57	58	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L56 OR (L47 OR L48 OR L49)
L58	3381	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L55 OR L57
L62	39073	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	ZEA MAYS?/BI
L63	31320	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	TRITICUM AESTIVUM/BI
L64	18095	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	SORGHUM/BI
L65	4291	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	SECALE CEREALE/BI
L66	5269	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	PANICUM/BI
L67	16049	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	HORDEUM VULGARE/BI
L68	2362	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	FAGOPYRUM ESCULENTUM/B I
L69	47260	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	CEREAL?/BI
L70	57166	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	BARLEY?/BI
L71	24491	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	BRAN/BI
L72	143166	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	CORN/BI
L73	45485	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	ORYZA SATIVA/BI
L74	118899	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	RICE/BI
L75	130626	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	COTTON/BI
L76	139287	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	SOYBEAN?/BI
L77	390	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L58 AND (L62 OR L63 OR L64 OR L65 OR L66 OR L67 OR L68 OR L69 OR L70 OR L71 OR L72 OR L73 OR L74 OR L75 OR L76)
L86	5	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L77 AND (L26 OR L27)
L87	1	SEA FILE=ZCAPLUS	SPE=ON	ABB=ON	PLU=ON	L86 AND NEW GROWTH/TI

=> s L28 or L31 or L59 or L81 or L82 or L85 or L87

L92 27 L28 OR L31 OR L59 OR L81 OR L82 OR L85 OR L87

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L92 ANSWER 1 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1294726 ZCAPLUS Full-text

DOCUMENT NUMBER: 147:481471

ENTRY DATE: Entered STN: 15 Nov 2007

TITLE: Process for soybean seed treatment

INVENTOR(S): Piscorscaia, Valentina; Siscanu, Gheorghe; Stefirta,
Anastasia; Turta, Constantin; Zubarev, Vera

10/810211

PATENT ASSIGNEE(S): Institutul de Fiziologie a Plantelor Al Academiei de
Stiinte A Republicii Moldova, Moldova; Institutul de
Chimie Al Academiei de Stiinte A Republicii Moldova
SOURCE: Mold., 8pp.
CODEN: MDXXCZ
DOCUMENT TYPE: Patent
LANGUAGE: Moldavian
INT. PATENT CLASSIF.:
MAIN: A01C001-00
SECONDARY: A01N055-00
CLASSIFICATION: 5-3 (Agrochemical Bioregulators)
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
MD 1386	F1	20000131	MD 1999-103	19990325 <--
PRIORITY APPLN. INFO.:			MD 1999-103	19990325 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
MD 1386	ICM	A01C001-00
	ICS	A01N055-00
	IPCI	A01C0001-00 [ICM,7]; A01N0055-00 [ICS,7]
	IPCR	A01C0001-00 [I,C*]; A01C0001-00 [I,A]; A01N0055-00 [I,C*]; A01N0055-00 [I,A]

ABSTRACT:

The claimed method for presowing soybean seed treatment involves use of 0.0001-0.001% aqueous solution of potassium gallate with formula $KC_7H_5O_4 \times 0.25 C_7H_6O_5$ x 1.5H₂O. The agent is prepared by reaction of gallic acid with K acetate in methanol at room temperature; the mixture is agitated until the clear solution yields precipitate with .apprx.50% yield. The product was characterized by elemental anal., summary formula, and IR spectroscopy. The seed treatment increases soybean yields.

SUPPL. TERM: soybean seed presowing treatment potassium gallate synthesis
INDEX TERM: Glycine max
Soybean

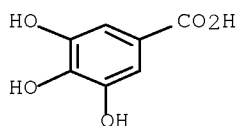
(process for soybean seed presowing
treatment with potassium gallate to increase grain
yields)
INDEX TERM: 17103-65-0P, Potassium gallate
ROLE: AGR (Agricultural use); SPN (Synthetic
preparation); BIOL (Biological study); PREP (Preparation);
USES (Uses)

(process for soybean seed presowing
treatment with potassium gallate to increase grain
yields)
INDEX TERM: 127-08-2, Potassium acetate 149-91-7, Gallic
acid, reactions
ROLE: RCT (Reactant); RACT (Reactant or reagent)
(process for soybean seed presowing
treatment with potassium gallate to increase grain
yields)

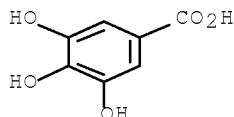
IT 17103-65-0P, Potassium gallate
RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(process for soybean seed presowing treatment with

10/810211

potassium gallate to increase grain yields)
RN 17103-65-0 ZCAPLUS
CN Benzoic acid, 3,4,5-trihydroxy-, potassium salt (1:1) (CA INDEX NAME)



IT 149-91-7, Gallic acid, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(process for soybean seed presowing treatment with
potassium gallate to increase grain yields)
RN 149-91-7 ZCAPLUS
CN Benzoic acid, 3,4,5-trihydroxy- (CA INDEX NAME)



L92 ANSWER 2 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:423693 ZCAPLUS Full-text
DOCUMENT NUMBER: 142:458552
ENTRY DATE: Entered STN: 19 May 2005
TITLE: Strobilurine fungicides with ethylene modulators
INVENTOR(S): Harden, John S.; Begliomini, Edson; Bardinelli, Ted
R.; Everson, Albert C.; Ypema, Hendrik; Holt, Thomas
J.; Zawierucha, Joseph E.; Westberg, Dan E.;
Rademacher, Wilhelm
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
INT. PATENT CLASSIF.:
MAIN: A01N
CLASSIFICATION: 5-2 (Agrochemical Bioregulators)
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005044002	A2	20050519	WO 2004-EP12514	20041105
WO 2005044002	A3	20050721		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW,
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,
 SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
 NE, SN, TD, TG

AU 2004286794 A1 20050519 AU 2004-286794 20041105
 CA 2544339 A1 20050519 CA 2004-2544339 20041105
 EP 1681931 A2 20060726 EP 2004-797635 20041105

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS

CN 1878468 A 20061213 CN 2004-80032917 20041105
 BR 2004016265 A 20070109 BR 2004-16265 20041105
 JP 2007510631 T 20070426 JP 2006-537257 20041105
 MX 2006004578 A 20060720 MX 2006-4578 20060425
 KR 2006113915 A 20061103 KR 2006-708704 20060504
 US 20070093389 A1 20070426 US 2006-578333 20060504
 ZA 2006004569 A 20080528 ZA 2006-4569 20060605
 IN 2006CN02002 A 20070608 IN 2006-CN2002 20060607

PRIORITY APPLN. INFO.: US 2003-517883P P 20031107
 WO 2004-EP12514 W 20041105

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2005044002	ICM	A01N
	IPCI	A01N [ICM,7]
	IPCR	A01N0037-44 [I,C*]; A01N0037-50 [I,A]; A01N0047-10 [I,C*]; A01N0047-24 [I,A]
	ECLA	A01N037/50+M; A01N047/24+M
AU 2004286794	IPCI	A01N0037-44 [I,C*]; A01N0047-10 [I,C*]; A01N0037-50 [I,A]; A01N0047-24 [I,A]
	IPCR	A01N0037-44 [I,C*]; A01N0037-50 [I,A]; A01N0047-10 [I,C*]; A01N0047-24 [I,A]
	ECLA	A01N037/50+M; A01N047/24+M
CA 2544339	IPCI	A01N0027-00 [I,A]; A01N0033-04 [I,A]; A01N0033-00 [I,C*]; A01N0037-36 [I,A]; A01N0037-40 [I,A]; A01N0037-42 [I,A]; A01N0037-44 [I,A]; A01N0037-50 [I,A]; A01N0043-40 [I,A]; A01N0043-34 [I,C*]; A01N0043-54 [I,A]; A01N0043-48 [I,C*]; A01N0043-653 [I,A]; A01N0043-64 [I,C*]; A01N0043-828 [I,A]; A01N0043-88 [I,A]; A01N0043-72 [I,C*]; A01N0047-24 [I,A]; A01N0047-10 [I,C*]; A01N0059-16 [I,A]; A01N0061-00 [I,A]
	IPCR	A01N0047-10 [I,C]; A01N0047-24 [I,A]; A01N0027-00 [I,C]; A01N0027-00 [I,A]; A01N0033-00 [I,C]; A01N0033-04 [I,A]; A01N0037-36 [I,C]; A01N0037-36 [I,A]; A01N0037-40 [I,A]; A01N0037-42 [I,C]; A01N0037-42 [I,A]; A01N0037-44 [I,C]; A01N0037-44 [I,A]; A01N0037-50 [I,A]; A01N0043-34 [I,C]; A01N0043-40 [I,A]; A01N0043-48 [I,C]; A01N0043-54 [I,A]; A01N0043-64 [I,C]; A01N0043-653 [I,A]; A01N0043-72 [I,C]; A01N0043-828 [I,A]; A01N0043-88 [I,A]; A01N0059-16 [I,C]; A01N0059-16 [I,A]; A01N0061-00 [I,C]; A01N0061-00 [I,A]
	ECLA	A01N037/50+M; A01N047/24+M
EP 1681931	IPCI	A01N0047-24 [ICM,7]; A01N0047-10 [ICM,7,C*]; A01N0043-88 [ICS,7]; A01N0043-72 [ICS,7,C*];

		A01N0043-54 [ICS,7]; A01N0043-48 [ICS,7,C*];
		A01N0043-40 [ICS,7]; A01N0043-34 [ICS,7,C*];
		A01N0037-50 [ICS,7]; A01N0037-44 [ICS,7,C*]
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CN 1878468	IPCI	A01N0047-24 [I,A]; A01N0047-10 [I,C*]; A01N0043-88 [I,A]; A01N0043-54 [I,A]; A01N0043-48 [I,C*]; A01N0043-40 [I,A]; A01N0043-34 [I,C*]; A01N0037-50 [I,A]; A01N0061-00 [N,A]; A01N0059-16 [N,A]; A01N0043-828 [N,A]; A01N0043-72 [N,C*]; A01N0043-653 [N,A]; A01N0043-64 [N,C*]; A01N0037-44 [N,A]; A01N0037-42 [N,A]; A01N0037-40 [N,A]; A01N0037-36 [N,A]; A01N0033-04 [N,A]; A01N0033-00 [N,C*]; A01N0027-00 [N,A]
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BR 2004016265	IPCI	A01N0047-24 [ICS,7]; A01N0047-10 [ICS,7,C*]; A01N0037-50 [ICS,7]; A01N0037-44 [ICS,7,C*]; A01N0043-40 [ICS,7]; A01N0043-34 [ICS,7,C*]; A01N0043-54 [ICS,7]; A01N0043-48 [ICS,7,C*]; A01N0043-88 [ICS,7]; A01N0043-72 [ICS,7,C*]
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JP 2007510631	IPCI	A01N0043-40 [I,A]; A01N0043-34 [I,C*]; A01N0037-08 [I,A]; A01N0059-16 [I,A]; A01G0007-00 [I,A]; A01P0003-00 [N,A]
	IPCR	A01N0043-34 [I,C]; A01N0043-40 [I,A]; A01G0007-00 [I,C]; A01G0007-00 [I,A]; A01N0037-08 [I,C]; A01N0037-44 [I,C*]; A01N0037-50 [I,A]; A01N0047-10 [I,C*]; A01N0047-24 [I,A]; A01N0059-16 [I,C]; A01N0059-16 [I,A]; A01P0003-00 [N,C]; A01P0003-00 [N,A]
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	FTERM	2B022/EA01; 2B022/EA10; 4H011/AA01; 4H011/AA03; 4H011/BA02; 4H011/BB06; 4H011/BB09; 4H011/BB13; 4H011/BB18; 4H011/DA16; 4H011/DD03; 4H011/DD04
MX 2006004578	IPCI	A01N [ICM,7]; A01N0027-00 [ICS,7]; A01N0033-04 [ICS,7]; A01N0033-00 [ICS,7,C*]; A01N0037-36 [ICS,7]; A01N0037-40 [ICS,7]; A01N0037-42 [ICS,7]; A01N0037-44 [ICS,7]; A01N0037-50 [ICS,7]; A01N0043-40 [ICS,7]; A01N0043-34 [ICS,7,C*]; A01N0043-54 [ICS,7]; A01N0043-48 [ICS,7,C*]; A01N0043-653 [ICS,7]; A01N0043-64 [ICS,7,C*]; A01N0043-828 [ICS,7]; A01N0043-88 [ICS,7]; A01N0043-72 [ICS,7,C*]; A01N0047-24 [ICS,7]; A01N0047-10 [ICS,7,C*]; A01N0059-16 [ICS,7]; A01N0061-00 [ICS,7]
KR 2006113915	IPCI	A01N0037-52 [I,A]; A01N0037-50 [I,A]; A01N0037-44 [I,C*]; A01N0043-40 [I,A]; A01N0043-34 [I,C*]; A01P0003-00 [I,A]
	ECLA	A01N037/50+M; A01N047/24+M

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US 20070093389 IPCI A01N0063-00 [I,A]; A01N0025-00 [I,A]; A01N0055-02
[I,A]; A01N0055-00 [I,C*]; A01N0033-24 [I,A];
A01N0033-00 [I,C*]
NCL 504/116.100; 504/118.000; 514/184.000; 514/501.000;
514/640.000
ZA 2006004569 IPCI A01N [I,S]
IPCR A01N [I,S]; A01N0037-44 [I,C*]; A01N0037-50 [I,A];
A01N0047-10 [I,C*]; A01N0047-24 [I,A]
ECLA A01N037/50+M; A01N047/24+M
IN 2006CN02002 IPCI A01N [ICM,7]
OTHER SOURCE(S): MARPAT 142:458552

ABSTRACT:

The invention relates to mixts. comprising known strobilurines (azoxystrobin, dimoxystrobin, fluoxastrobin, etc.) and ethylene modulators selected from inhibitors of ethylene biosynthesis which inhibit the conversion of S-adenosyl-L-methionine into ACC, inhibitors of ethylene biosynthesis which block the conversion of ACC into ethylene, or inhibitors of ethylene action. Damage to the host plant was less when the mixts. were applied than with strobilurines alone. A specific use is the control of *Phakopsora pachyrhizae* and *Phakopsora meibomia* in soybean.

SUPPL. TERM: strobilurine fungicide ethylene modulator ~~safer~~
INDEX TERM: *Phakopsora meibomia*
Phakopsora pachyrhizi
(control in soybean; strobilurine fungicides with
ethylene modulators)
INDEX TERM: Fabaceae
Glycine max
(rust control in; strobilurine fungicides with ethylene
modulators)
INDEX TERM: Fungicides
(strobilurine fungicides with ethylene modulators)
INDEX TERM: 61-82-5D, 3-Amino-1,2,4-triazole, mixts. with strobilurines
62-57-7D, α -Aminoisobutyric acid, mixts. with
strobilurines 69-72-7D, Salicylic acid, mixts. with
strobilurines 71-44-3D, Spermine, mixts. with
strobilurines 110-60-1D, Putrescine, mixts. with
strobilurines 121-46-0D, 2,5-Norbornadiene, mixts. with
strobilurines 121-79-9D, Propyl gallate, mixts.
with strobilurines 124-20-9D, Spermidine, mixts. with
strobilurines 645-88-5D, Aminoxyacetic acid, mixts. with
strobilurines 3100-04-7D, 1-Methylcyclopropene, mixts.
with strobilurines 14701-21-4D, Silver ion, mixts. with
strobilurines, biological studies 14701-22-5D, Nickel(II)
ion, mixts. with strobilurines, biological studies
22541-53-3D, Cobalt(II) ion, mixts. with strobilurines,
biological studies 49669-74-1D, Aminoethoxyvinylglycine,
mixts. with strobilurines 76738-62-0D, Paclobutrazol,
mixts. with strobilurines 83657-22-1D, Uniconazole, mixts.
with strobilurines 95266-40-3D, Trinexapac-ethyl, mixts.
with strobilurines 110374-54-4D, mixts. with strobilurines
117428-22-5D, Picoxystrobin, mixts. with ethylene modulators
126572-77-8D, Strobilurine, mixts. with ethylene modulators
127277-53-6D, Prohexadione-Calcium, mixts. with
strobilurines 131860-33-8D, Azoxystrobin, mixts. with
ethylene modulators 133408-50-1D, Metominostrobin, mixts.
with ethylene modulators 135158-54-2D,
Acibenzolar-S-methyl, mixts. with strobilurines
141517-21-7D, Trifloxystrobin, mixts. with ethylene
modulators 143390-89-0D, Kresoxim-methyl, mixts. with

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ethylene modulators 149961-52-4D, Dimoxystrobin, mixts.
with ethylene modulators 175013-18-0D, Pyraclostrobin,
mixts. with ethylene modulators 248593-16-0D,
Orysastrobin, mixts. with ethylene modulators
361377-29-9D, Fluoxastrobin, mixts. with ethylene modulators
851450-32-3 851450-33-4, Cabrio-salicylic acid mixture
851596-29-7, Cabrio-cobalt chloride mixture 851596-30-0,
Headline-Keylate Cobalt mixture
ROLE: AGR (Agricultural use); BIOL (Biological study); USES
(Uses)

(strobilurine fungicides with ethylene modulators)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2
CITINGS)

DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009

OS.CITING.REFS: CAPLUS 2008:734960; 2006:632743

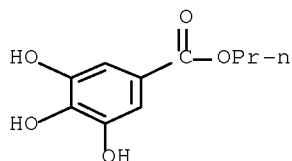
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD.

REFERENCE(S): (1) Anon; US 20030060371 A1
(2) Anon; US 5869424 A ZCAPLUS
(3) Anon; US 6369090 B1 ZCAPLUS
(4) Anon; WO 9600005 A1 ZCAPLUS
(5) Anon; WO 9740688 A1 ZCAPLUS
(6) Anon; WO 9948370 A1 ZCAPLUS

IT 121-79-9D, Propyl gallate, mixts. with strobilurines
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(strobilurine fungicides with ethylene modulators)

RN 121-79-9 ZCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, propyl ester (CA INDEX NAME)



L92 ANSWER 3 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:817606 ZCAPLUS Full-text

DOCUMENT NUMBER: 141:273021

ENTRY DATE: Entered STN: 07 Oct 2004

TITLE: Use of aromatic hydroxy compounds as herbicide
safeners

INVENTOR(S): Bickers, Udo; Willms, Lothar; Hacker, Erwin; Rosinger,
Christopher

PATENT ASSIGNEE(S): Bayer Cropscience G.m.b.H., Germany

SOURCE: PCT Int. Appl., 127 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

INT. PATENT CLASSIF.:

MAIN: A01N025-32

SECONDARY: A01N037-40; A01N037-44; C07C229-60; C07C229-64;
C07C235-46; C07C237-36; C07C237-44; C07C243-38;
C07C255-53; C07C255-54; C07C255-55; C07C255-58;

10/810211

C07C255-59; C07C065-03

CLASSIFICATION: 5-3 (Agrochemical Bioregulators)

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004084631	A1	20041007	WO 2004-EP2797	20040318
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004224813	A1	20041007	AU 2004-224813	20040318
CA 2520228	A1	20041007	CA 2004-2520228	20040318
EP 1610611	A1	20060104	EP 2004-721478	20040318
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK			
BR 2004008943	A	20060404	BR 2004-8943	20040318
CN 1764374	A	20060426	CN 2004-80007969	20040318
JP 2006521311	T	20060921	JP 2006-504717	20040318
US 20040224844	A1	20041111	US 2004-810211	20040326
ZA 2005006657	A	20070131	ZA 2005-6657	20050819
KR 2006002857	A	20060109	KR 2005-717888	20050923
IN 2005CN02374	A	20070831	IN 2005-CN2374	20050923
PRIORITY APPLN. INFO.:			DE 2003-10313480	A 20030326
			WO 2004-EP2797	W 20040318

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004084631	ICM	A01N025-32
	ICS	A01N037-40; A01N037-44; C07C229-60; C07C229-64; C07C235-46; C07C237-36; C07C237-44; C07C243-38; C07C255-53; C07C255-54; C07C255-55; C07C255-58; C07C255-59; C07C065-03
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	ECLA	A01N025/32; A01N037/40; A01N037/40+M; A01N037/44; C07C065/03; C07C065/21; C07C069/017; C07C069/88; C07C069/90; C07C069/92

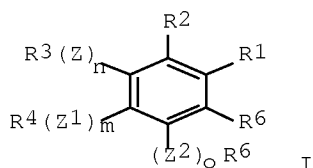
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	ECLA	A01N025/32; A01N037/40; A01N037/40+M; A01N037/44; C07C065/03; C07C065/21; C07C069/017; C07C069/88; C07C069/90; C07C069/92
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	ECLA	A01N025/32; A01N037/40; A01N037/40+M; A01N037/44; C07C065/03; C07C065/21; C07C069/017; C07C069/88; C07C069/90; C07C069/92
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	ECLA	A01N025/32; A01N037/40; A01N037/40+M; A01N037/44;

		C07C065/03; C07C065/21; C07C069/017; C07C069/88; C07C069/90; C07C069/92
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JP 2006521311	IPCI	A01N0025-00 [I,A]; A01N0043-80 [I,A]; A01N0043-72 [I,C*]; A01N0047-36 [I,A]; A01N0047-28 [I,C*]; A01P0013-02 [I,A]
	IPCR	A01N0025-00 [I,C]; A01N0025-00 [I,A]; A01N0025-32 [I,C*]; A01N0025-32 [I,A]; A01N0037-36 [I,C*]; A01N0037-40 [I,A]; A01N0037-44 [I,C*]; A01N0037-44 [I,A]; A01N0043-72 [I,C]; A01N0043-80 [I,A]; A01N0047-28 [I,C]; A01N0047-36 [I,A]; A01P0013-02 [I,C]; A01P0013-02 [I,A]; C07C0065-00 [I,C*]; C07C0065-03 [I,A]; C07C0065-21 [I,A]; C07C0069-00 [I,C*]; C07C0069-017 [I,A]; C07C0069-88 [I,A]; C07C0069-90 [I,A]; C07C0069-92 [I,A]
	ECLA	A01N025/32; A01N037/40; A01N037/40+M; A01N037/44; C07C065/03; C07C065/21; C07C069/017; C07C069/88; C07C069/90; C07C069/92
	FTERM	4H011/AB01; 4H011/BA03; 4H011/BB10; 4H011/BB14; 4H011/BC06; 4H011/DA15; 4H011/DD03; 4H011/DD04
US 20040224844	IPCI	A01N0043-66 [ICM,7]; A01N0043-64 [ICM,7,C*]; A01N0025-32 [ICS,7]
	IPCR	A01N0025-32 [I,C*]; A01N0025-32 [I,A]; A01N0037-36 [I,C*]; A01N0037-40 [I,A]; A01N0037-44 [I,C*]; A01N0037-44 [I,A]; C07C0065-00 [I,C*]; C07C0065-03 [I,A]; C07C0065-21 [I,A]; C07C0069-00 [I,C*]; C07C0069-017 [I,A]; C07C0069-88 [I,A]; C07C0069-90 [I,A]; C07C0069-92 [I,A]
	NCL	504/111.000
	ECLA	A01N025/32; A01N037/40; A01N037/40+M; A01N037/44; C07C065/03; C07C065/21; C07C069/017; C07C069/88; C07C069/90; C07C069/92
ZA 2005006657	IPCI	A01N [I,S]; C07C [I,S]
	IPCR	A01N [I,S]; A01N0025-32 [I,C*]; A01N0025-32 [I,A]; A01N0037-36 [I,C*]; A01N0037-40 [I,A]; A01N0037-44 [I,C*]; A01N0037-44 [I,A]; C07C [I,S]; C07C0065-00 [I,C*]; C07C0065-03 [I,A]; C07C0065-21 [I,A]; C07C0069-00 [I,C*]; C07C0069-017 [I,A]; C07C0069-88 [I,A]; C07C0069-90 [I,A]; C07C0069-92 [I,A]
	ECLA	C07C235/46; A01N025/32; A01N037/40; A01N037/40+M; A01N037/44; C07C065/03; C07C065/21; C07C069/017; C07C069/88; C07C069/90; C07C069/92; C07C243/38;

10/810211

C07C255/53; C07C255/55
KR 2006002857 IPCI A01N0025-32 [I,A]; A01N0037-40 [I,A]; A01N0037-36
[I,C*]; A01N0037-44 [I,A]
ECLA A01N025/32; A01N037/40; A01N037/40+M; A01N037/44;
C07C065/03; C07C065/21; C07C069/017; C07C069/88;
C07C069/90; C07C069/92
IN 2005CN02374 IPCI A01N0025-32 [ICM,7]
OTHER SOURCE(S): MARPAT 141:273021
GRAPHIC IMAGE:



ABSTRACT:

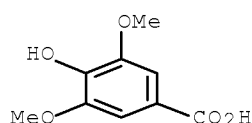
The aromatic hydroxy compds. I [R1 = carboxy or a carboxy derivative such as CN; R1,R6 = H, halo, SCN, CN or a (un)substituted hydrocarbyl; R3 = H, halo SCN, A1 or B1 if n = 0, and A1, B1 or C1 if n = 1; R4 = H, halo, SCN or CN if m = 0, and A2, B2 or C2 if m = 1; R5 = H, A3 or B3 if o = 0, and A3, B3 or C3 if m = 1; A1, A2, A3 = (un)substituted hydrocarbyl; B1, B2, B3 = acyl; C1, C2, C3 = (un)substituted heterocyclyl; Z, Z1, Z2 = O, SOx or NR7; R7 = (un)substituted hydrocarbyl, acyl, acyloxy, etc.; x = 1 or 2; m,n,o = 0 or 1] or their salts are herbicide safeners.

SUPPL. TERM: arom hydroxy compd herbicide safener
INDEX TERM: Herbicide antidotes
(aromatic hydroxy compds.)
INDEX TERM: 141112-29-0, Isoxaflutole 173159-57-4, Foramsulfuron
ROLE: AGR (Agricultural use); BIOL (Biological study); USES
(Uses)
(aromatic hydroxy compds. as safeners for)
INDEX TERM: 530-57-4, 3,5-Dimethoxy-4-hydroxybenzoic acid
1132-21-4, 3,5-Dimethoxybenzoic acid
ROLE: AGR (Agricultural use); BIOL (Biological study); USES
(Uses)
(herbicide safener)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
RECORD.
REFERENCE(S): (1) Amborab, B; PLANT PHYSIOLOGY AND BIOCHEMISTRY 2002,
V40(12), P1051 ZCAPLUS
(2) Banas, A; SWEDISH JOURNAL OF AGRICULTURAL RESEARCH
V23(2), P67 ZCAPLUS
(3) Bartholomeus van, R; WO 8404676 A 1984 ZCAPLUS
(4) Bayer Ag; DE 3618004 A 1987 ZCAPLUS
(5) Bunn, E; WO 9925191 A 1999 ZCAPLUS
(6) Ici Ltd; GB 1543964 A 1979 ZCAPLUS
(7) Kosinkiewicz, B; ACTA MICROBIOL POL 1981, V33(2), P103
(8) Mersie, W; ENVIRONMENTAL AND EXPERIMENTAL BOTANY 1990,
V30(4), P443 ZCAPLUS
(9) Plant Biolog Defence System La; EP 0908097 A 1999

ZCAPLUS

- (10) Ray, S; JOURNAL OF EXPERIMENTAL BOTANY 1980, V31(125), P1651 ZCAPLUS
 (11) Thomas, V; US 4321084 A 1982 ZCAPLUS
 (12) van Bartholomeus, T; US 4263322 A 1981 ZCAPLUS
 (13) Walters, D; ANNALS OF APPLIED BIOLOGY, GBASSOCIATION OF APPLIED BIOLOGISTS, WELLESBOURNE 1993, V122, P451 ZCAPLUS
 (14) Xinhua Industry And Trade; CN 1090756 A 1994 ZCAPLUS
 (15) Zingel, V; EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY 1990, V25(8), P673 ZCAPLUS

IT ~~530-57-4~~, 3,5-Dimethoxy-4-hydroxybenzoic acid
 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
 (herbicide ~~safener~~)
 RN 530-57-4 ZCAPLUS
 CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



L92 ANSWER 4 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:20880 ZCAPLUS Full-text
 DOCUMENT NUMBER: 140:72561
 ENTRY DATE: Entered STN: 11 Jan 2004
 TITLE: High throughput screening of plant growth regulators using phytomixotrophic cells
 INVENTOR(S): Kwak, Sang-soo; Lee, Haeng-soon; Kwon, Suk-yoon; Kim, Chang-jin; Lee, Hyang-burm; Lee, Sang-han
 PATENT ASSIGNEE(S): Korea Research Institute of Bioscience and Biotechnology, S. Korea
 SOURCE: PCT Int. Appl., 46 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 INT. PATENT CLASSIF.:
 MAIN: C12Q001-02
 CLASSIFICATION: ~~S-3~~ (Agrochemical Bioregulators)
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004003225	A1	20040108	WO 2003-KR1041	20030528 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

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KR 2004001352	A	20040107	KR 2002-36512	20020627 <--
AU 2003228117	A1	20040119	AU 2003-228117	20030528 <--
JP 2005530513	T	20051013	JP 2004-517364	20030528 <--
US 20050176584	A1	20050811	US 2005-519511	20050216 <--
PRIORITY APPLN. INFO.:			KR 2002-36512	A 20020627 <--
			WO 2003-KR1041	W 20030528

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004003225	ICM	C12Q001-02
	IPCI	C12Q0001-02 [ICM,7]
	IPCR	C12Q0001-02 [I,C*]; C12Q0001-02 [I,A]; G01N0033-50 [I,C*]; G01N0033-50 [I,A]
	ECLA	G01N033/50F; S01N; S01N
KR 2004001352	IPCI	C12Q0001-02 [ICM,7]
	ECLA	G01N033/50F; S01N; S01N
AU 2003228117	IPCI	C12Q0001-02 [ICM,7]
	IPCR	C12Q0001-02 [I,C*]; C12Q0001-02 [I,A]; G01N0033-50 [I,C*]; G01N0033-50 [I,A]
	ECLA	G01N033/50F; S01N; S01N
JP 2005530513	IPCI	C12Q0001-02 [ICM,7]
	IPCR	G01N0033-50 [I,A]; G01N0033-50 [I,C*]
	ECLA	G01N033/50F; S01N; S01N
	FTERM	4B063/QA06; 4B063/QA18; 4B063/QQ09; 4B063/QQ61; 4B063/QR41; 4B063/QR78; 4B063/QX01
US 20050176584	IPCI	A01N0025-00 [ICM,7]; C12Q0001-00 [ICS,7]
	IPCR	C12Q0001-02 [I,C*]; C12Q0001-02 [I,A]; G01N0033-50 [I,C*]; G01N0033-50 [I,A]
	NCL	504/116.100; 435/004.000
	ECLA	G01N033/50F; S01N; S01N

ABSTRACT:

The present invention relates to a method for high throughput screening of plant growth regulator, more particularly to the method comprising; culturing phytomixotrophic cells in a microwell plate in which candidates of plant growth regulator were added, treating 2,3,5-triphenyltetrazolium chloride thereto, reacting thereof by adding ethanol after removing solns. from microwells, transferring the reacting solution into the new microwell plate, and measuring optical d. with a high throughput screening reader. Since the method of the present invention can rapidly and conveniently screen many samples and can also evaluate in vivo activities of plant growth regulators, it can effectively be used as a screening method for plant growth inhibitors and activators.

SUPPL. TERM: plant growth regulator screening phytomixotrophic cell
Marchantia Nicotiana

INDEX TERM: Actinomycetes
(culture solution; high-throughput screening of plant growth regulators using phytomixotrophic cells)

INDEX TERM: Catalpa bignonioides
Staphylea bumalda
Viburnum dilatatum
Viburnum erosum
(fruit extract; high-throughput screening of plant growth regulators using phytomixotrophic cells)

INDEX TERM: Ribes fasciculatum chinense
(fruit, and trunk extract; high-throughput screening of plant growth regulators using phytomixotrophic cells)

INDEX TERM: Densitometry (optical)

Drug screening
 Herbicides
 (high-throughput screening of plant growth regulators using phytomixotrophic cells)

INDEX TERM: Hormones, plant
 ROLE: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
 (high-throughput screening of plant growth regulators using phytomixotrophic cells)

INDEX TERM: Marchantia polymorpha
 Nicotiana tabacum
 (high-throughput screening of plant growth regulators using phytomixotrophic cells of)

INDEX TERM: Elaeocarpus sylvestris ellipticus
 (leaf extract; high-throughput screening of plant growth regulators using phytomixotrophic cells)

INDEX TERM: Cayratia japonica
 Cocculus trilobus
 (leaf, and fruit extract; high-throughput screening of plant growth regulators using phytomixotrophic cells)

INDEX TERM: Ligustrum japonicum
 (leaf, and small branch extract; high-throughput screening of plant growth regulators using phytomixotrophic cells)

INDEX TERM: Celtis choseniana
 Clerodendrum trichotomum
 (leaf, and trunk extract; high-throughput screening of plant growth regulators using phytomixotrophic cells)

INDEX TERM: Castanopsis cuspidata sieboldii
 Ilex integra
 Litsea japonica
 Quercus gilva
 (leaf, trunk heartwood, and trunk bark extract; high-throughput screening of plant growth regulators using phytomixotrophic cells)

INDEX TERM: Aralia continentalis
 (leaf, trunk, and fruit extract; high-throughput screening of plant growth regulators using phytomixotrophic cells)

INDEX TERM: Carpesium abrotanoides
 Valeriana officinalis latifolia
 (leaf, trunk, and root extract; high-throughput screening of plant growth regulators using phytomixotrophic cells)

INDEX TERM: Daphniphyllum macropodium
 (leaf, trunk, fruit, and small branch extract; high-throughput screening of plant growth regulators using phytomixotrophic cells)

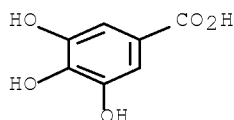
INDEX TERM: Plant cell
 (phytomixotrophic; high-throughput screening of plant growth regulators using phytomixotrophic cells)

INDEX TERM: Wasabia koreana
 (root extract; high-throughput screening of plant growth regulators using phytomixotrophic cells)

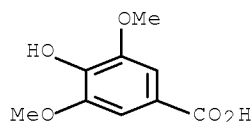
INDEX TERM: Trichosanthes kirilowii japonica
 (seed extract; high-throughput screening of plant growth regulators using phytomixotrophic

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cells)
INDEX TERM: Cinnamomum camphora
(trunk heartwood, and trunk bark extract; high-throughput
screening of plant growth regulators using
phytomixotrophic cells)
INDEX TERM: 65-85-0, Benzoic acid, biological studies 66-76-2,
Dicumarol 91-64-5, Coumarin 93-35-6, Umbelliferon
121-34-6, Vanillic acid 123-31-9, Hydroquinone, biological
studies 149-91-7, Gallic acid, biological
studies 330-55-2, Linuron 331-39-5, Caffeic acid
490-79-9, Gentisic acid 530-57-4, Syringic acid
583-17-5, o-Coumaric acid 709-98-8, Propanil 1135-24-6,
Ferulic acid 1912-24-9, Atrazine 3943-89-3,
Protocatechuic acid, ethyl ester 7169-34-8, 3-Coumaranone
7400-08-0, [p-Coumaric acid 19666-30-9, Oxadiazon
32861-85-1, Chlormethoxynil 52570-16-8, Naproanilide
71283-80-2 81334-34-1, Imazapyr 83164-33-4, Diflufenican
93697-74-6, Pyrazosulfuron ethyl 97886-45-8, Dithiopyr
168088-61-7, Pyribenzoxim 412928-75-7, LGC-42153
ROLE: AGR (Agricultural use); BSU (Biological
study, unclassified); BIOL (Biological study); USES (Uses)
(high-throughput screening of plant growth
regulators using phytomixotrophic cells)
INDEX TERM: 298-96-4, 2,3,5-Triphenyltetrazolium chloride
ROLE: ARU (Analytical role, unclassified); BUU (Biological
use, unclassified); ANST (Analytical study); BIOL
(Biological study); USES (Uses)
(high-throughput screening of plant growth
regulators using phytomixotrophic cells treated with)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD.
REFERENCE(S): (1) Dalton, C; Biochem Soc Trans 1980, V8(4), P475 ZCAPLUS
(2) Otero, A; Cytotechnology 1991, V6(2), P137 MEDLINE
(3) Rich, P; FEMS Microbiol Lett 2001, V202(2), P181 ZCAPLUS
(4) Sato, F; Plant Cell Rep 1987, V6(6), P401 ZCAPLUS
IT 149-91-7, Gallic acid, biological studies 530-57-4,
Syringic acid
RL: AGR (Agricultural use); BSU (Biological study,
unclassified); BIOL (Biological study); USES (Uses)
(high-throughput screening of plant growth regulators using
phytomixotrophic cells)
RN 149-91-7 ZCAPLUS
CN Benzoic acid, 3,4,5-trihydroxy- (CA INDEX NAME)



RN 530-57-4 ZCAPLUS
CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



L92 ANSWER 5 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2003:814935 ZCAPLUS Full-text
 DOCUMENT NUMBER: 140:72529
 ENTRY DATE: Entered STN: 17 Oct 2003
 TITLE: Phenolic compounds from olive oil mill wastewater
 against the "tricky germination" of two worst weeds
 AUTHOR(S): Aliotta, Giovanni; Cafiero, Gennaro; Fiorentino,
 Antonio
 CORPORATE SOURCE: Dipartimento di Scienze della Vita, Seconda Universita
 degli Studi di Napoli, Caserta, 43-81100, Italy
 SOURCE: Allelopathy (2002), 129-138. Editor(s): Reigosa,
 Manuel J.; Pedrol, Nuria. Science Publishers, Inc.:
 Enfield, N. H.
 CODEN: 69EQQJ; ISBN: 1-57808-254-4
 DOCUMENT TYPE: Conference
 LANGUAGE: English
 CLASSIFICATION: 5~3 (Agrochemical Bioregulators)
 ABSTRACT:
 The polluting reverse osmosis fraction of olive oil wastewater was examined for
 its ~~herbicidal~~ activity against ~~seed~~ germination of two major weeds:
 redroot pigweed (Amaranthus retroflexus L.) and lambsquarter (Chenopodium album
 L.) after the release of the ~~seed~~ dormancy. The reverse osmosis fraction
 strongly inhibited ~~seed~~ germination of both weeds, while a synthetic fraction
 prepared from thirteen pure polyphenols isolated from the original active
 fraction, resulted less active on weed germination. Thus, phytotoxicity could
 be due to a synergic action of polyphenols with other unidentified substances
 present in the wastewater. Microscopic observations showed the ~~seed~~
 structure of the two weeds and their germination responses in presence and
 absence of reverse osmosis fraction.
 SUPPL. TERM: phenol olive oil mill wastewater ~~herbicide~~ pigweed
 lambsquarter germination; Amaranthus Chenopodium germination
 phenol olive oil mill wastewater ~~herbicide~~
 INDEX TERM: Olive oil
 ROLE: MSC (Miscellaneous)
 (mill wastewater; phenolic compds. from olive oil mill
 wastewater effect on germination of redroot pigweed and
 lambsquarter)
 INDEX TERM: Wastewater
 (olive oil mill; phenolic compds. from olive oil mill
 wastewater effect on germination of redroot pigweed and
 lambsquarter)
 INDEX TERM: Amaranthus retroflexus
 Chenopodium album
 Germination
~~Herbicides~~
~~Weed control~~
 (phenolic compds. from olive oil mill wastewater effect
 on germination of redroot pigweed and lambsquarter)
 INDEX TERM: Allelochemicals
 ROLE: AGR (Agricultural use); BSU (Biological study,

unclassified); BIOL (Biological study); USES (Uses)
 (phenolic compds. from olive oil mill wastewater effect
 on germination of redroot pigweed and lambsquarter)

INDEX TERM: Phenols, biological studies
 ROLE: AGR (Agricultural use); BSU (Biological study,
 unclassified); BIOL (Biological study); USES (Uses)
 (polyphenols, nonpolymeric; phenolic compds. from olive
 oil mill wastewater effect on germination of redroot
 pigweed and lambsquarter)

INDEX TERM: 99-50-3, Protocatechuic acid 99-96-7, 4-Hydroxybenzoic
 acid, biological studies 102-32-9,
 3,4-Dihydroxyphenylacetic acid 120-80-9, Catechol,
 biological studies 121-34-6, Vanillic acid 156-38-7,
 4-Hydroxyphenylacetic acid 331-39-5, Caffeic acid
 501-94-0, Tyrosol 530-57-4,
 4-Hydroxy-3,5-dimethoxybenzoic acid 530-59-6, Sinapic acid
 1135-24-6, Ferulic acid 7400-08-0, p-Coumaric acid
 10597-60-1, 3-Hydroxytyrosol
 ROLE: AGR (Agricultural use); BSU (Biological
 study, unclassified); BIOL (Biological study); USES (Uses)
 (phenolic compds. from olive oil mill wastewater effect
 on germination of redroot pigweed and lambsquarter)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1
 CITINGS)

DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009

OS.CITING.REFS: CAPLUS 2005:526740

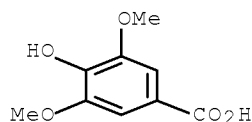
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
 RECORD.

REFERENCE(S): (1) Aliotta, G; Allelopathy J 1996, V3, P207
 (2) Aliotta, G; Allelopathy J (in press) 2001
 (3) Aliotta, G; Current Topics in Phytochemistry 2000, V3,
 P167 ZCAPLUS
 (4) Aliotta, G; J Chem Ecol 1994, V20, P2761 ZCAPLUS
 (5) Aliotta, G; Proceedings of XXII Annual Meeting of the
 Plant Growth Regulator Society of America 1995,
 V93 -97
 (6) Blum, U; J Chem Ecol 1991, V17, P1045 ZCAPLUS
 (7) Capasso, R; Current Topics in Phytochemistry 1997, V1,
 P145 ZCAPLUS
 (8) Corner, E; The seeds of dicotyledons 1976
 (9) Duke, S; Weed Technology 1987, V1, P122 ZCAPLUS
 (10) Harlan, J; Crops & Man 1992
 (11) Inderjit; Bot Rev 1995, V61, P28
 (12) Inderjit; Bot Rev 1996, V62, P186
 (13) Leather, G; The Science of Allelopathy 1986
 (14) Leck, M; Ecology of soil seed bank 1989
 (15) Narwal, S; Allelopathy in agriculture and forestry 1994
 (16) Rice, E; Allelopathy (Ed 2) 1984
 (17) Waller, G; ACS Symposium 1987
 (18) Zimdahl, R; The fundamentals of weed science 1993
 (19) Zohary, D; Science 1975, V187, P319

IT 530-57-4, 4-Hydroxy-3,5-dimethoxybenzoic acid
 RL: AGR (Agricultural use); BSU (Biological study,
 unclassified); BIOL (Biological study); USES (Uses)
 (phenolic compds. from olive oil mill wastewater effect on germination
 of redroot pigweed and lambsquarter)

RN 530-57-4 ZCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



L92 ANSWER 6 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2003:271589 ZCAPLUS Full-text
 DOCUMENT NUMBER: 138:288664
 ENTRY DATE: Entered STN: 09 Apr 2003
 TITLE: Water-soluble films for packaging of chlorine compounds
 INVENTOR(S): Higasa, Shintaro; Fujiwara, Naoki; Isosaki, Takanori
 PATENT ASSIGNEE(S): Kuraray Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 INT. PATENT CLASSIF.:
 MAIN: B65D065-46
 SECONDARY: C08F008-12; C08F216-06; C08J005-18; C08K005-09;
 C08K005-13; C08L029-04; C08F226-00; C08L001-00
 CLASSIFICATION: 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 5, 61
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003104435	A	20030409	JP 2001-302359	20010928 <--
PRIORITY APPLN. INFO.:			JP 2001-302359	20010928 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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	ICS	C08F008-12; C08F216-06; C08J005-18; C08K005-09; C08K005-13; C08L029-04; C08F226-00; C08L001-00
	IPCI	B65D0065-46 [ICM, 7]; C08F0008-12 [ICS, 7]; C08F0008-00 [ICS, 7, C*]; C08F0216-06 [ICS, 7]; C08F0216-00 [ICS, 7, C*]; C08J0005-18 [ICS, 7]; C08K0005-09 [ICS, 7]; C08K0005-13 [ICS, 7]; C08K0005-00 [ICS, 7, C*]; C08L0029-04 [ICS, 7]; C08L0029-00 [ICS, 7, C*]; C08F0226-00 [ICS, 7]; C08L0001-00 [ICS, 7]
	IPCR	B65D0065-46 [I, C*]; B65D0065-46 [I, A]; C08F0008-00 [I, C*]; C08F0008-12 [I, A]; C08F0216-00 [I, C*]; C08F0216-06 [I, A]; C08J0005-18 [I, C*]; C08J0005-18 [I, A]; C08K0005-00 [I, C*]; C08K0005-09 [I, A]; C08K0005-13 [I, A]; C08L0029-00 [I, C*]; C08L0029-04 [I, A]; C08L0101-00 [I, C*]; C08L0101-16 [I, A]

ABSTRACT:

The films for packaging of Cl compds. such as ~~pesticides~~ and antimicrobial agents, comprise modified vinyl alc. polymers having 1-10 mol% N-vinylamide monomer units and optionally contain carbohydrates, gallic acid or its C1-5 alkyl esters, and reducing hydroxycarboxylic acids or their salts. Thus, a film comprising saponified vinyl acetate-N-vinylcaprolactam copolymer (N-vinylcaprolactam unit content 6.0 mol%) 100, glycerin 15, etherified starch 10, Pr gallate 1.0, citric acid 0.8, and talc 5 parts showed Young's modulus

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2.2 kg/mm², tensile strength 2.0 kg/cm², and good chemical resistance (against trichloroisocyanuric acid) and dissolved in H₂O at 20° within 14 s.

SUPPL. TERM: water soluble film modified polyvinyl alc; saponified vinyl acetate vinylcaprolactam copolymer film; chlorine ~~pesticide~~ packaging water soluble film; chem resistant water soluble packaging film; chloroisocyanurate antimicrobial packaging film polyvinyl alc; carbohydrate vinyl alc polymer packaging film; gallate vinyl alc polymer packaging film; hydroxycarboxylate vinyl alc polymer packaging film

INDEX TERM: Carbohydrates, uses
ROLE: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(additive for improved water solubility; chemical resistant water-soluble vinyl alc.-vinylamide copolymer films for packaging of Cl compds.)

INDEX TERM: Chemically resistant materials
Plastic films
(chemical resistant water-soluble vinyl alc.-vinylamide copolymer films for packaging of Cl compds.)

INDEX TERM: Water purification
(chlorination; chemical resistant water-soluble vinyl alc.-vinylamide copolymer films for packaging of Cl compds.)

INDEX TERM: Swimming pools
(chlorine-containing antimicrobial agents; chemical resistant water-soluble vinyl alc.-vinylamide copolymer films for packaging of Cl compds.)

INDEX TERM: Antibacterial agents
Antimicrobial agents
Pesticides
(chlorine-containing; chemical resistant water-soluble vinyl alc.-vinylamide copolymer films for packaging of Cl compds.)

INDEX TERM: Packaging materials
vinylamide
(films; chemical resistant water-soluble vinyl alc.-vinylamide copolymer films for packaging of Cl compds.)

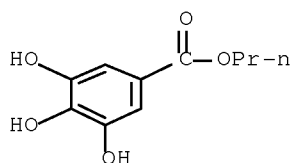
INDEX TERM: Carboxylic acids, uses
ROLE: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(hydroxy, additive for improved water solubility; chemical resistant water-soluble vinyl alc.-vinylamide copolymer films for packaging of Cl compds.)

INDEX TERM: Water purification
(sterilization and disinfection; chemical resistant water-soluble vinyl alc.-vinylamide copolymer films for packaging of Cl compds.)

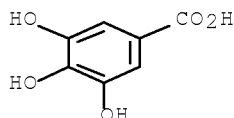
INDEX TERM: 50-81-7, L-Ascorbic acid, uses 77-92-9, Citric acid, uses 87-69-4, Tartaric acid, uses 99-20-7, Trehalose 121-79-9, Propyl gallate 149-91-7, Gallic acid, uses 831-61-8, Ethyl gallate 6915-15-7, Malic acid 9005-25-8, Corn starch, uses 9005-25-8D, Starch, ether or oxidized 66230-82-8, MS 3800
ROLE: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(additive for improved water solubility; chemical resistant water-soluble vinyl alc.-vinylamide copolymer films for

10/810211

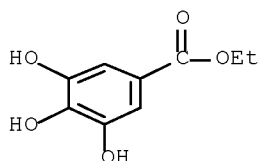
packaging of Cl compds.)
INDEX TERM: 87-90-1, Trichloroisocyanuric acid
ROLE: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(antimicrobial agent; chemical resistant water-soluble vinyl alc.-vinylamide copolymer films for packaging of Cl compds.)
INDEX TERM: 25086-89-9DP, Vinyl acetate-N-vinyl-2-pyrrolidone copolymer, saponified 27399-70-8DP, Vinyl acetate-N-vinylcaprolactam copolymer, saponified 28928-24-7DP, saponified 80512-26-1DP, N-Vinylacetamide-vinyl acetate copolymer, saponified 108941-57-7DP, Vinyl acetate-N-vinylformamide copolymer, saponified
ROLE: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(chemical resistant water-soluble vinyl alc.-vinylamide copolymer films for packaging of Cl compds.)
IT 121-79-9, Propyl gallate 149-91-7, Gallic acid, uses 831-61-8, Ethyl gallate
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(additive for improved water solubility; chemical resistant water-soluble vinyl alc.-vinylamide copolymer films for packaging of Cl compds.)
RN 121-79-9 ZCAPLUS
CN Benzoic acid, 3,4,5-trihydroxy-, propyl ester (CA INDEX NAME)



RN 149-91-7 ZCAPLUS
CN Benzoic acid, 3,4,5-trihydroxy- (CA INDEX NAME)



RN 831-61-8 ZCAPLUS
CN Benzoic acid, 3,4,5-trihydroxy-, ethyl ester (CA INDEX NAME)



L92 ANSWER 7 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2003:254147 ZCAPLUS Full-text
 DOCUMENT NUMBER: 138:267220
 ENTRY DATE: Entered STN: 02 Apr 2003
 TITLE: Shelf-stable, virulent preparation containing
~~Agrobacterium~~ cells, an acidulant and a phenolic
 compound
 INVENTOR(S): Sinnott, Robert A.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S., 5 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 INT. PATENT CLASSIF.:
 MAIN: A01N025-00
 SECONDARY: A01N063-00; C12N001-00; C12N001-12; C12N001-20
 US PATENT CLASSIF.: 424093400; 424405000; 435252100; 435822000
 CLASSIFICATION: 5--6 (Agrochemical Bioregulators)
 Section cross-reference(s): 10
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6540997	B1	20030401	US 2000-491158	20000126 <--
PRIORITY APPLN. INFO.:			US 1999-117460P	P 19990126 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6540997	ICM	A01N025-00
	ICS	A01N063-00; C12N001-00; C12N001-12; C12N001-20
	INCL	424093400; 424405000; 435252100; 435822000
	IPCI	A01N0025-00 [ICM,7]; A01N0063-00 [ICS,7]; C12N0001-00 [ICS,7]; C12N0001-12 [ICS,7]; C12N0001-20 [ICS,7]
	IPCR	A01N0063-00 [I,C*]; A01N0063-00 [I,A]
	NCL	424/093.400; 424/405.000; 435/252.100; 435/822.000
	ECLA	A01N063/00+M

ABSTRACT:

A virulent preparation of ~~Agrobacterium~~ cells, includes ~~Agrobacterium~~ cells, an acidulant, and a phenolic compound that is preferably Et vanillin. The preparation is shelf stable at ambient temperature for several months. The preparation may further contain a dry excipient material, a food coloring agent, a flow agent, a plant hormone, a bacterial growth promoter and an antifungal agent.

SUPPL. TERM: ~~Agrobacterium~~ acidulant phenolic formulation stability
 INDEX TERM: Food

(dyes; in shelf-stable, virulent preparation containing *Agrobacterium* cells, acidulant and phenolic compound)

INDEX TERM: Dyes
(food; in shelf-stable, virulent preparation containing *Agrobacterium* cells, acidulant and phenolic compound)

INDEX TERM: Fungicides
Solvents
(in shelf-stable, virulent preparation containing *Agrobacterium* cells, acidulant and phenolic compound)

INDEX TERM: Hormones, microbial
ROLE: AGR (Agricultural use); ARG (Analytical reagent use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(in shelf-stable, virulent preparation containing *Agrobacterium* cells, acidulant and phenolic compound)

INDEX TERM: Hormones, plant
ROLE: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(in shelf-stable, virulent preparation containing *Agrobacterium* cells, acidulant and phenolic compound)

INDEX TERM: *Agrobacterium*
Agrochemical formulations
Stability
(shelf-stable, virulent preparation containing *Agrobacterium* cells, acidulant and phenolic compound)

INDEX TERM: Flavonoids
Lignans
Phenols, biological studies
ROLE: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(shelf-stable, virulent preparation containing *Agrobacterium* cells, acidulant and phenolic compound)

INDEX TERM: 99-96-7, p-Hydroxybenzoic acid, biological studies
121-32-4, Ethyl vanillin 121-33-5, Vanillin 134-96-3, Syringaldehyde 458-35-5, Coniferyl alcohol
530-57-4, Syringic acid 530-59-6, Sinapic acid
537-33-7, Sinapyl alcohol 1080-12-2, Vanillalacetone
1135-24-6, Ferulic acid 2041-35-2, 5-Hydroxyferulic acid methyl ester 2309-07-1, Ferulic acid methyl ester
2478-38-8, Acetosyringone 7558-80-7, Sodium dihydrogen phosphate 9005-53-2, Lignin, biological studies
20733-94-2, Sinapic acid methyl ester
ROLE: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(shelf-stable, virulent preparation containing *Agrobacterium* cells, acidulant and phenolic compound)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD.

REFERENCE(S): (1) Chapple; US 5981837 A 1999 ZCAPLUS
(2) Emerson; US 6251951 B1 2001 ZCAPLUS
(3) Michelsen; US 6143543 A 2000 ZCAPLUS

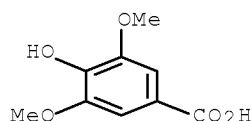
IT 530-57-4, Syringic acid

10/810211

RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL
(Biological study); USES (Uses)
(shelf-stable, virulent preparation containing *Agrobacterium* cells,
acidulant and phenolic compound)

RN 530-57-4 ZCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



L92 ANSWER 8 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:174533 ZCAPLUS Full-text

DOCUMENT NUMBER: 138:182064

ENTRY DATE: Entered STN: 07 Mar 2003

TITLE: Transformation of soybeans by pretreatment with
cytokinin and regeneration of embryonic explants of
soybean seed on porous substrates in presence of
vir-inducing phenol compound

INVENTOR(S): Dias, Kalyani Mallika

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 7 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

INT. PATENT CLASSIF.:

MAIN: C12N015-82

SECONDARY: C12N015-87; A01H005-00; C12N015-84

US PATENT CLASSIF.: 800294000; 800312000; 800292000; 800293000; 435469000;
435470000

CLASSIFICATION: 3-2 (Biochemical Genetics)
Section cross-reference(s): 11

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030046733	A1	20030306	US 2001-948292	20010906 <--
PRIORITY APPLN. INFO.:			US 2001-948292	20010906 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 20030046733	ICM	C12N015-82
	ICS	C12N015-87; A01H005-00; C12N015-84
	INCL	800294000; 800312000; 800292000; 800293000; 435469000; 435470000
	IPCI	C12N0015-82 [ICM,7]; C12N0015-87 [ICS,7]; A01H0005-00 [ICS,7]; C12N0015-84 [ICS,7]
	IPCR	C12N0015-82 [I,C*]; C12N0015-82 [I,A]; C12N0015-84 [I,C*]; C12N0015-84 [I,A]
	NCL	800/294.000; 435/469.000; 435/470.000; 800/292.000; 800/293.000; 800/312.000
	ECLA	C12N015/82A4B

ABSTRACT:

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Soybean are transformed by inserting a functional gene into an explant of a soybean (particularly after being pre-treated with high doses of cytokinin (6-BAP)), transferring embryonic axes explants of the mature soybean seeds incubated on wet filter papers in the presence of at least one phenol compound naturally produced when plant cells have been wounded, to induce vir genes, and incubated in the dark in such presence at 20-25° for >24 h. After incubation, the explants are transferred to a media to develop shoots from explants, control Agrobacterium growth, and after shoot elongation, separated shoots, with or without roots, are either transferred to soil, or contacted with at least 1 mg/L IBA before transplant.

SUPPL. TERM: soybean transformation regeneration cytokinin culture
INDEX TERM: Antibiotics
Herbicides
(selection agent; transformation of soybeans by pretreatment with cytokinin and regeneration of embryonic explants of soybean seed on porous substrates in presence of vir-inducing phenol compound)
INDEX TERM: Agrobacterium
Electroporation
Glycine max
Microprojectile bombardment
Plant tissue culture
Regeneration, plant
Transformation, genetic
(transformation of soybeans by pretreatment with cytokinin and regeneration of embryonic explants of soybean seed on porous substrates in presence of vir-inducing phenol compound)
INDEX TERM: Chimeric gene
Cytokinins
Hormones, plant
Phenols, biological studies
ROLE: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(transformation of soybeans by pretreatment with cytokinin and regeneration of embryonic explants of soybean seed on porous substrates in presence of vir-inducing phenol compound)
INDEX TERM: Gene, microbial
ROLE: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(vir, induction during regeneration; transformation of soybeans by pretreatment with cytokinin and regeneration of embryonic explants of soybean seed on porous substrates in presence of vir-inducing phenol compound)
INDEX TERM: 1071-83-6, Glyphosate 6379-56-2, Hygromycin 8063-07-8, Kanamycin 35597-43-4, Bialaphos
ROLE: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(selection agent; transformation of soybeans by pretreatment with cytokinin and regeneration of embryonic explants of soybean seed on porous substrates in presence of vir-inducing phenol compound)
INDEX TERM: 134-96-3, Syringaldehyde 498-02-2, Acetovanillone

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530-57-4, Syringic acid 530-59-6, Sinapic acid
2478-38-8, Acetosyringone 90426-22-5,
 α -Hydroxyacetosyringone
ROLE: BUU (Biological use, unclassified); BIOL (Biological
study); USES (Uses)

(signal compound in porous paper support medium;
transformation of soybeans by pretreatment with
cytokinin and regeneration of embryonic explants
of soybean seed on porous substrates
in presence of vir-inducing phenol compound)

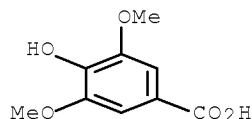
INDEX TERM: 87-51-4, IAA, biological studies 1214-39-7,
6-Benzylaminopurine
ROLE: BUU (Biological use, unclassified); BIOL (Biological
study); USES (Uses)

(transformation of soybeans by pretreatment
with cytokinin and regeneration of embryonic
explants of soybean seed on
porous substrates in presence of vir-inducing phenol
compound)

IT 530-57-4, Syringic acid
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(signal compound in porous paper support medium; transformation of
soybeans by pretreatment with cytokinin and regeneration of
embryonic explants of soybean seed on
porous substrates in presence of vir-inducing phenol compound)

RN 530-57-4 ZCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



L92 ANSWER 9 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:917188 ZCAPLUS Full-text
DOCUMENT NUMBER: 138:91292
ENTRY DATE: Entered STN: 04 Dec 2002
TITLE: Antimicrobial cotton cloth utilizing chemicals of
plant origin. Antibacterial action of the cotton
cloth fixed with tannic acid
AUTHOR(S): Fukuda, Fumie; Yamaguchi, Haruhiko; Higuchi, Mitsuo
CORPORATE SOURCE: Lab. Polymer Sci. Forest Resour., Div. Bioprod.
Biotechnol., Sci., Dep. Forest Forest Prod. Sci., Fac.
Agric., Kyushu Univ., Fukuoka, 812-8581, Japan
SOURCE: Gakugei Zasshi - Kyushu Daigaku Daigakuin Nogaku
Kenkyuin (2002), 56(2), 153-161
CODEN: GZKDBV
PUBLISHER: Kyushu Daigaku Daigakuin Nogaku Kenkyuin
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
CLASSIFICATION: 40-9 (Textiles and Fibers)
Section cross-reference(s): §
ABSTRACT:

10/810211

In our previous paper, aminoethylated cotton cloth fixed with tannic acid was reported to have a high antibacterial activity against Escherichia coli W3110 and Staphylococcus aureus IF013276. In this paper, the results of the expts. carried out to investigate the mechanisms of the antibacterial action of the tannic acid-modified cotton cloth are described. Antibacterial activities of model compds. having different nos. of phenolic hydroxyl group were evaluated against E. coli W3110 and S. aureus IF013276. It was found that the value of min. inhibitory concentration (MIC) of the model compound decreased with an increase in the number of phenolic OH in a mol. It was also found that the model compound having a CO₂H group had a greater MIC than the corresponding model compound having no CO₂H did. Thus, the antibacterial activities of phenolic compds. were ascribed to their phenolic OH. Aminoethylated cotton cloths fixed with model compds. having different nos. of phenolic OH and CO₂H showed antibacterial activities. In this case, too, the activity increased with an increase in the number of OH in the model compound fixed. As no distinct halo was observed in the culture-tests of the both bacteria the phenolic compds. were considered to have antibacterial activities in the state of being fixed on the cotton cloth.

SUPPL. TERM: antimicrobial cotton cloth tannic acid action; phenolic hydroxy group antibacterial cotton cloth

INDEX TERM: Antibacterial agents
(antibacterial action of cotton cloth fixed with tannic acid)

INDEX TERM: Tannins
ROLE: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(antibacterial action of cotton cloth fixed with tannic acid)

INDEX TERM: Structure-activity relationship
(bactericidal; antibacterial action of cotton cloth fixed with tannic acid)

INDEX TERM: Textiles
(cotton; antibacterial action of cotton cloth fixed with tannic acid)

INDEX TERM: Phenols, biological studies
ROLE: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(model compds. for tannic acid; antibacterial action of cotton cloth fixed with tannic acid)

INDEX TERM: Hydroxyl group
(phenolic, antibacterial activity in relation to; antibacterial action of cotton cloth fixed with tannic acid)

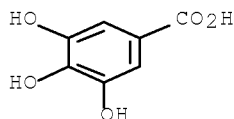
INDEX TERM: 87-66-1, 1,2,3-Benzenetriol 89-86-1, β -Resorcylic acid 99-96-7, p-Hydroxybenzoic acid, biological studies 108-46-3, Resorcinol, biological studies 108-95-2, Phenol, biological studies 120-80-9, Catechol, biological studies 149-91-7, Gallic acid, biological studies 331-39-5
ROLE: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(model compound for tannic acid; antibacterial action of cotton cloth fixed with tannic acid)

IT 149-91-7, Gallic acid, biological studies
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(model compound for tannic acid; antibacterial action of cotton cloth fixed with tannic acid)

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RN 149-91-7 ZCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy- (CA INDEX NAME)



L92 ANSWER 10 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:914294 ZCAPLUS Full-text

DOCUMENT NUMBER: 138:282742

ENTRY DATE: Entered STN: 03 Dec 2002

TITLE: Allelopathic action of exometabolites of Tagetes L. species on the growth and development of quack-grass

AUTHOR(S): Mashkovs'ka, S. P.; Didik, N. P.; Brechko, V. L.

CORPORATE SOURCE: Nats. Bot. Sad im. M. M. Grishka, NAN Ukr., Kiev, 01014, Ukraine

SOURCE: Fiziologiya i Biokhimiya Kul'turnykh Rastenii (2002), 34(5), 437-442

CODEN: FBKRAT; ISSN: 0532-9310

PUBLISHER: Izdatel'stvo "Logos"

DOCUMENT TYPE: Journal

LANGUAGE: Ukrainian

CLASSIFICATION: 5-3 (Agrochemical Bioregulators)

ABSTRACT:

The influence of water-soluble, volatile allelochems. of some marigold species (Tagetes L.), as well as decay products of their residues on quack-grass (Elytrigia repens (L.) Nevski) was studied. It was found that plant residues, phenolic acids, volatile oils of Tagetes species have an inhibitory effect on the growth and development of quack-grass. Exudates of T. signata and T. lucida were shown to be promising for allelopathic control of E. repens in agroecosystems.

SUPPL. TERM: Tagetes exometabolite allelopathy Elytrigia herbicide

INDEX TERM: Allelopathy
Elytrigia repens

Herbicides

Tagetes

Tagetes lucida

Tagetes patula

Tagetes tenuifolia

(allelopathic action of exometabolites of Tagetes species on growth and development of quack-grass)

INDEX TERM: Allelochemicals

ROLE: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(allelopathic action of exometabolites of Tagetes species on growth and development of quack-grass)

INDEX TERM: 99-96-7, biological studies 121-34-6, Vanillic acid

303-07-1, γ -Resorcylic acid 331-39-5, Caffeic acid

530-57-4, Syringic acid 1135-24-6, Ferulic acid

7400-08-0, p-Cumaric acid

ROLE: AGR (Agricultural use); BSU (Biological

study, unclassified); OCU (Occurrence, unclassified); BIOL

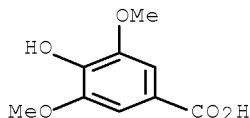
10/810211

(Biological study); OCCU (Occurrence); USES (Uses)
(allelopathic action on growth and development of
quack-grass of exometabolites of Tagetes species, containing)

IT 530-57-4, Syringic acid
RL: AGR (Agricultural use); BSU (Biological study,
unclassified); OCU (Occurrence, unclassified); BIOL (Biological study);
OCCU (Occurrence); USES (Uses)
(allelopathic action on growth and development of quack-grass of
exometabolites of Tagetes species, containing)

RN 530-57-4 ZCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



L92 ANSWER 11 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:204969 ZCAPLUS Full-text

DOCUMENT NUMBER: 136:215855

ENTRY DATE: Entered STN: 19 Mar 2002

TITLE: Preservatives for and preservation of agricultural
and horticultural products

INVENTOR(S): Iijima, Yoshihiko; Fukushima, Kenji; Nakamura, Michie

PATENT ASSIGNEE(S): Dainichiseika Color and Chemical Mfg. Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

INT. PATENT CLASSIF.:

MAIN: A01N003-00

SECONDARY: A01N003-02; A23B007-148; A23L003-3508; A23L003-358

CLASSIFICATION: 17-6 (Food and Feed Chemistry)

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002080301	A	20020319	JP 2000-239548	20000808 <--
JP 4077145	B2	20080416		
KR 2005081181	A	20050818	KR 2005-54911	20050624 <--
JP 2005304507	A	20051104	JP 2005-196319	20050705 <--
JP 4077470	B2	20080416		

PRIORITY APPLN. INFO.:

JP 1999-257261	A	19990910 <--
JP 1999-257262	A	19990910 <--
JP 2000-109509	A	20000411 <--
JP 2000-109510	A	20000411 <--
JP 2000-109511	A	20000411 <--
JP 2000-206952	A	20000707 <--
JP 2000-239548	A3	20000808 <--
KR 2000-53423	A3	20000908 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2002080301	ICM	A01N003-00

ICS A01N003-02; A23B007-148; A23L003-3508; A23L003-358
 IPCI A01N0003-00 [I,A]; A01N0003-02 [I,A]; A01P0003-00
 [I,A]; A01N0037-06 [I,A]; A01N0037-10 [I,A];
 A01N0037-38 [I,A]; A01N0037-40 [I,A]; A01N0037-36
 [I,C*]; A01N0057-20 [I,A]; A01N0057-00 [I,C*];
 A23B0007-148 [I,A]; A23B0007-144 [I,C*]; A23L0003-3508
 [I,A]; A23L0003-3463 [I,C*]; A23L0003-358 [I,A];
 A23L0003-3454 [I,C*]
 IPCR A23L0003-3463 [I,C*]; A23L0003-3508 [I,A]; A01N0003-00
 [I,C*]; A01N0003-00 [I,A]; A01N0003-02 [I,A];
 A23B0007-144 [I,C*]; A23B0007-148 [I,A]; A23L0003-3454
 [I,C*]; A23L0003-358 [I,A]; A01N0037-06 [I,C];
 A01N0037-06 [I,A]; A01N0037-10 [I,C]; A01N0037-10
 [I,A]; A01N0037-36 [I,C]; A01N0037-38 [I,A];
 A01N0037-40 [I,A]; A01N0057-00 [I,C]; A01N0057-20
 [I,A]; A01P0003-00 [I,C]; A01P0003-00 [I,A]
 KR 2005081181 IPCI A23B0007-144 [ICM,7]
 ECLA A23B007/10; A23B007/144; A23B007/154; A23B007/157;
 A23B009/18; A23B009/26; A23B009/30
 JP 2005304507 IPCI A01N0003-00 [I,A]; A01N0003-02 [I,A]; A01P0003-00
 [I,A]; A01N0037-06 [I,A]; A01N0037-10 [I,A];
 A01N0037-38 [I,A]; A01N0037-40 [I,A]; A01N0037-36
 [I,C*]; A01N0057-20 [I,A]; A01N0057-00 [I,C*];
 A23B0007-148 [I,A]; A23B0007-144 [I,C*]; A23L0003-3508
 [I,A]; A23L0003-3463 [I,C*]; A23L0003-358 [I,A];
 A23L0003-3454 [I,C*]
 IPCR A01N0003-00 [I,C]; A01N0003-00 [I,A]; A23B0007-144
 [I,C*]; A23B0007-148 [I,A]; A01N0003-02 [I,A];
 A01N0037-06 [I,C]; A01N0037-06 [I,A]; A01N0037-10
 [I,C]; A01N0037-10 [I,A]; A01N0037-36 [I,C];
 A01N0037-38 [I,A]; A01N0037-40 [I,A]; A01N0057-00
 [I,C]; A01N0057-20 [I,A]; A01P0003-00 [I,C];
 A01P0003-00 [I,A]; A23L0003-3454 [I,C]; A23L0003-3463
 [I,C]; A23L0003-3508 [I,A]; A23L0003-358 [I,A]
 FTERM 4B069/HA01; 4B069/HA11; 4B069/KA03; 4B069/KA07;
 4B069/KA10; 4B069/KB04; 4B069/KC13; 4B069/KC24;
 4B069/KD02; 4H011/BB06; 4H011/BB09; 4H011/BB18;
 4H011/BB19; 4H011/CA04; 4H011/CB10; 4H011/CD03;
 4H011/DH02

ABSTRACT:

The preservatives (I) are useful for sustained supply of CO₂ and inhibition of ethylene formation in the atmospheric of the agricultural and horticultural products. I comprises carboxylic acids and bicarbonate salt.

SUPPL. TERM: bicarbonate carbon dioxide agricultural horticultural product preservation
 INDEX TERM: Polymers, biological studies
 ROLE: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
 (acidic group-containing; preservatives for and preservation of agricultural and horticultural products)
 INDEX TERM: Carboxyl group
 (polymers containing; preservatives for and preservation of agricultural and horticultural products)
 INDEX TERM: Controlled atmospheres
 Crop (plant)
 Food preservation
 Food preservatives
 Malus pumila
 Phosphate group

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(preservatives for and preservation of
agricultural and horticultural products)

INDEX TERM: Bicarbonates
Carboxylic acids, biological studies
ROLE: AGR (Agricultural use); BIOL (Biological study); USES
(Uses)
(preservatives for and preservation of
agricultural and horticultural products)

INDEX TERM: Functional groups
(sulfate, polymers containing; preservatives for and
preservation of agricultural and horticultural
products)

INDEX TERM: Functional groups
(sulfonate group, polymers containing; preservatives for and
preservation of agricultural and horticultural
products)

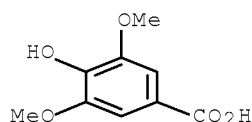
INDEX TERM: 56-86-0, Glutamic acid, biological studies 59-67-6,
Nicotinic acid, biological studies 65-85-0, Benzoic acid,
biological studies 68-04-2, Trisodium citrate 69-72-7,
Salicylic acid, biological studies 77-92-9, Citric acid,
biological studies 97-65-4, Itaconic acid, biological
studies 110-44-1, Sorbic acid 112-38-9, Undecylenic acid
121-34-6, Vanillic acid 124-04-9, Adipic acid, biological
studies 124-38-9, Carbon dioxide, biological studies
144-55-8, Sodium bicarbonate, biological studies 331-39-5,
Caffeic acid 530-57-4, Syringic acid 621-82-9,
Cinnamic acid, biological studies 1135-24-6, Ferulic acid
7400-08-0, p-Cumaric acid 18996-35-5, Monosodium citrate
ROLE: AGR (Agricultural use); BIOL (Biological
study); USES (Uses)
(preservatives for and preservation of
agricultural and horticultural products)

INDEX TERM: 74-85-1, Ethylene, biological studies
ROLE: BSU (Biological study, unclassified); BIOL (Biological
study)
(preservatives for and preservation of
agricultural and horticultural products)

IT 530-57-4, Syringic acid
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(preservatives for and preservation of agricultural and
horticultural products)

RN 530-57-4 ZCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



L92 ANSWER 12 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:51614 ZCAPLUS Full-text
DOCUMENT NUMBER: 136:114778
ENTRY DATE: Entered STN: 18 Jan 2002
TITLE: Cloning, sequencing and characterization of
Arabidopsis sinapoylglucose-malate sinapoyltransferase

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and its use in the manipulation of ~~plant~~ secondary metabolism

INVENTOR(S): Chapple, Clinton C. S.
 PATENT ASSIGNEE(S): Purdue Research Foundation, USA
 SOURCE: PCT Int. Appl., 90 pp.
 CODEN: PIXXD2

DOCUMENT TYPE: ~~Patent~~
 LANGUAGE: English
 INT. PATENT CLASSIF.:
 MAIN: C12N009-00
 CLASSIFICATION: 7-5 (Enzymes)
 Section cross-reference(s): 3, 5, 11, 16
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002004614	A2	20020117	WO 2001-US21549	20010709 <--
WO 2002004614	A3	20020808		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 20020026658	A1	20020228	US 2001-901252	20010709 <--
PRIORITY APPLN. INFO.:			US 2000-216593P	P 20000707 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002004614	ICM	C12N009-00
	IPCI	C12N0009-00 [ICM,7]
	IPCR	C07K0014-415 [I,C*]; C07K0014-415 [I,A]; C12N0009-10 [I,C*]; C12N0009-10 [I,A]; C12N0015-54 [I,C*]; C12N0015-54 [I,A]; C12N0015-82 [I,C*]; C12N0015-82 [I,A]
	ECLA	C07K014/415; C12N009/10C1A; C12N015/82C4B; C12N015/82C4B12; C12N015/82C8B; C12N015/82C8B6E; K01K; M12N
US 20020026658	IPCI	A01H0005-00 [ICM,7]; C12N0015-82 [ICS,7]; C12N0015-29 [ICS,7]; C12N0015-62 [ICS,7]
	IPCR	C07K0014-415 [I,C*]; C07K0014-415 [I,A]; C12N0009-10 [I,C*]; C12N0009-10 [I,A]; C12N0015-82 [I,C*]; C12N0015-82 [I,A]
	NCL	800/281.000; 435/069.800; 536/023.600; 800/278.000; 800/302.000
	ECLA	C07K014/415; C12N009/10C1A; C12N015/82C4B; C12N015/82C4B12; C12N015/82C8B6E; K01K; M12N

ABSTRACT:

A gene SNG1 has been isolated from Arabidopsis encoding sinapoylglucose-malate sinapoyltransferase (SMT). Isolation, cloning, sequencing and characterization of SNG1 are disclosed. The cDNA sequence and the encoded amino acid sequence of SMT are provided. SMT is responsible for the substitution of a glucose moiety on sinapoylglucose with a malate moiety to form sinapoylmalate in ~~plant~~ vacuoles. The enzyme is useful for the manipulation of ~~plant~~ secondary metabolism

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SUPPL. TERM: Arabidopsis gene SNG1 sinapoylglucose malate
sinapoyltransferase cDNA sequence; ~~plant~~ secondary metab
sinapoylglucose malate sinapoyltransferase Arabidopsis

INDEX TERM: Solar UV radiation
(B, altering ~~plant~~ resistance to; cloning,
sequencing and characterization of Arabidopsis
sinapoylglucose-malate sinapoyltransferase and its use in
manipulation of ~~plant~~ secondary metabolism)

INDEX TERM: Gene, ~~plant~~
ROLE: AGR (Agricultural use); BCP (Biochemical process); BPN
(Biosynthetic preparation); BSU (Biological study,
unclassified); PRP (Properties); BIOL (Biological study);
PREP (Preparation); PROC (Process); USES (Uses)
(SNG1; cloning, sequencing and characterization of
Arabidopsis sinapoylglucose-malate sinapoyltransferase
and its use in manipulation of ~~plant~~ secondary
metabolism)

INDEX TERM: Disease resistance, ~~plant~~
(altering of; cloning, sequencing and characterization of
Arabidopsis sinapoylglucose-malate sinapoyltransferase
and its use in manipulation of ~~plant~~ secondary
metabolism)

INDEX TERM: Arabidopsis
Arabidopsis thaliana
DNA sequences
Genetic engineering
Genetic vectors
Molecular cloning
Protein sequences
cDNA sequences
(cloning, sequencing and characterization of Arabidopsis
sinapoylglucose-malate sinapoyltransferase and its use in
manipulation of ~~plant~~ secondary metabolism)

INDEX TERM: Chimeric gene, ~~plant~~
ROLE: AGR (Agricultural use); BCP (Biochemical process); BPN
(Biosynthetic preparation); BUU (Biological use,
unclassified); BIOL (Biological study); PREP (Preparation);
PROC (Process); USES (Uses)
(cloning, sequencing and characterization of Arabidopsis
sinapoylglucose-malate sinapoyltransferase and its use in
manipulation of ~~plant~~ secondary metabolism)

INDEX TERM: Antisense oligonucleotides
ROLE: BUU (Biological use, unclassified); BIOL (Biological
study); USES (Uses)
(cloning, sequencing and characterization of Arabidopsis
sinapoylglucose-malate sinapoyltransferase and its use in
manipulation of ~~plant~~ secondary metabolism)

INDEX TERM: Monosaccharides
ROLE: AGR (Agricultural use); BCP (Biochemical process); BUU
(Biological use, unclassified); BIOL (Biological study);
PROC (Process); USES (Uses)
(esters, secondary metabolism of; cloning, sequencing and
characterization of Arabidopsis sinapoylglucose-malate
sinapoyltransferase and its use in manipulation of
~~plant~~ secondary metabolism)

INDEX TERM: ~~Plant~~ pathogen
(insect, altering ~~plant~~ resistance to; cloning,
sequencing and characterization of Arabidopsis
sinapoylglucose-malate sinapoyltransferase and its use in
manipulation of ~~plant~~ secondary metabolism)

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INDEX TERM: Transformation, genetic
(of plant cells; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of plant secondary metabolism)

INDEX TERM: Insecta
(plant pathogen, altering plant resistance to; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of plant secondary metabolism)

INDEX TERM: Transgene
ROLE: AGR (Agricultural use); BCP (Biochemical process); BPN (Biosynthetic preparation); BUU (Biological use, unclassified); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(plant; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of plant secondary metabolism)

INDEX TERM: Fermentation
(protein; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of plant secondary metabolism)

INDEX TERM: Metabolism, plant
(secondary; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of plant secondary metabolism)

INDEX TERM: Genetic element
ROLE: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(signal sequence; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of plant secondary metabolism)

INDEX TERM: UV B radiation
(solar, altering plant resistance to; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of plant secondary metabolism)

INDEX TERM: Plant cell
(transformation of; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of plant secondary metabolism)

INDEX TERM: Embryophyta
Plants
(transgenic; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of plant secondary metabolism)

INDEX TERM: 9005-53-2, Lignin, biological studies
ROLE: AGR (Agricultural use); BCP (Biochemical process); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)
(altering lignin biosynthesis; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of

INDEX TERM: ~~plant~~ secondary metabolism)
 18696-26-9, Sinapine
 ROLE: AGR (Agricultural use); BCP (Biochemical process); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)
 (altering sinapoylcholine content; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of ~~plant~~ secondary metabolism)

INDEX TERM: 390003-54-0D, subfragments are claimed
 ROLE: AGR (Agricultural use); BCP (Biochemical process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process); USES (Uses)
 (amino acid sequence; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of ~~plant~~ secondary metabolism)

INDEX TERM: 390003-53-9D, subfragments are claimed
 ROLE: AGR (Agricultural use); BCP (Biochemical process); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process); USES (Uses)
 (amino acid sequence; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of ~~plant~~ secondary metabolism)

INDEX TERM: 76095-65-3P, Sinapoylglucose: malate sinapoyltransferase
 ROLE: AGR (Agricultural use); BCP (Biochemical process); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of ~~plant~~ secondary metabolism)

INDEX TERM: 65-85-0D, Benzoic acid, monosaccharide ester conjugates
 69-72-7D, o-Hydroxybenzoic acid, monosaccharide ester conjugates
 99-06-9D, monosaccharide ester conjugates
 99-50-3D, 3,4-Dihydroxybenzoic acid, monosaccharide ester conjugates
 121-34-6D, Vanillic acid, monosaccharide ester conjugates
 331-39-5D, Caffeic acid, monosaccharide ester conjugates
 530-57-4D, Syringic acid, monosaccharide ester conjugates
 530-59-6D, Sinapic acid, monosaccharide ester conjugates
 537-73-5D, Isoferulic acid, monosaccharide ester conjugates
 583-17-5D, o-Coumaric acid, monosaccharide ester conjugates
 588-30-7D, monosaccharide ester conjugates
 621-82-9D, Cinnamic acid, monosaccharide ester conjugates
 1135-24-6D, Ferulic acid, monosaccharide ester conjugates
 1782-55-4D, 5-Hydroxyferulic acid, monosaccharide ester conjugates
 ROLE: AGR (Agricultural use); BCP (Biochemical process); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)
 (cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of ~~plant~~ secondary metabolism)

INDEX TERM: 390003-50-6
 ROLE: AGR (Agricultural use); BCP (Biochemical process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process); USES (Uses)

(nucleotide sequence; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of plant secondary metabolism)

INDEX TERM: 390003-51-7D, subfragments are claimed 390003-52-8D, subfragments are claimed
 ROLE: AGR (Agricultural use); BCP (Biochemical process); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process); USES (Uses)
 (nucleotide sequence; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of plant secondary metabolism)

INDEX TERM: 50-69-1D, Ribose, esters 50-99-7D, Glucose, esters 57-48-7D, Fructose, esters 58-86-6D, Xylose, esters 59-23-4D, Galactose, esters 65-42-9D, Lyxose, esters 87-79-6D, Sorbose, esters 147-81-9D, Arabinose, esters 551-84-8D, Xylulose, esters 2152-76-3D, Idose, esters 3019-74-7D, Sedoheptulose, esters 3458-28-4D, Mannose, esters 5556-48-9D, Ribulose, esters 5987-68-8D, Altrose, esters 6038-51-3D, Allose, esters 17598-81-1D, Tagatose, esters 19163-87-2D, Gulose, esters 23140-52-5D, Psicose, esters 30077-17-9D, Talose, esters
 ROLE: AGR (Agricultural use); BCP (Biochemical process); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)
 (secondary metabolism of; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in manipulation of plant secondary metabolism)

INDEX TERM: 390053-12-0 390053-13-1 390053-14-2 390053-15-3 390053-16-4 390053-17-5
 ROLE: PRP (Properties)
 (unclaimed nucleotide sequence; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in the manipulation of plant secondary metabolism)

INDEX TERM: 390053-18-6 390053-19-7 390053-20-0
 ROLE: PRP (Properties)
 (unclaimed protein sequence; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in the manipulation of plant secondary metabolism)

INDEX TERM: 389862-23-1
 ROLE: PRP (Properties)
 (unclaimed sequence; cloning, sequencing and characterization of Arabidopsis sinapoylglucose-malate sinapoyltransferase and its use in the manipulation of plant secondary metabolism)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009

OS.CITING.REFS: CAPLUS 2007:462047

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD.

REFERENCE(S): (1) Anon; WO 9723599 A2 ZCAPLUS
 (2) Anon; WO 9937786 A2 ZCAPLUS

IT 530-57-4D, Syringic acid, monosaccharide ester conjugates
 RL: AGR (Agricultural use); BCP (Biochemical process); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process);

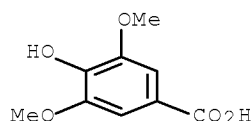
10/810211

USES (Uses)

(cloning, sequencing and characterization of Arabidopsis
sinapoylglucose-malate sinapoyltransferase and its use in manipulation
of plant secondary metabolism)

RN 530-57-4 ZCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



L92 ANSWER 13 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:833004 ZCAPLUS Full-text

DOCUMENT NUMBER: 135:354168

ENTRY DATE: Entered STN: 16 Nov 2001

TITLE: Antimicrobial compositions containing a phenol
oxidizing enzyme system and an enhancing agent
INVENTOR(S): Schneider, Palle; Moller, Soren; Biedermann, Kirsten;
Johansen, Charlotte

PATENT ASSIGNEE(S): Novozymes A/S, Den.

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

INT. PATENT CLASSIF.:

MAIN: A01N065-00
SECONDARY: A01N063-02; A01N063-00; A01N065-00; A01N043-84;
A01N043-78; A01N043-42; A01N043-38; A01N037-40;
A01N037-38; A01N035-10; A01N035-04; A01N033-26;
A01N033-10; A01N031-16; A01N031-08; A01N033-06;
A01N063-02; A01N043-84; A01N043-78

CLASSIFICATION: 5-2 (Agrochemical Bioregulators)

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001084937	A1	20011115	WO 2001-DK315	20010507 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 20020102246	A1	20020801	US 2001-850316	20010507 <--
PRIORITY APPLN. INFO.:			DK 2000-755	A 20000508 <--
			US 2000-204710P	P 20000516 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001084937	ICM	A01N065-00

ICS A01N063-02; A01N063-00; A01N065-00; A01N043-84;
A01N043-78; A01N043-42; A01N043-38; A01N037-40;
A01N037-38; A01N035-10; A01N035-04; A01N033-26;
A01N033-10; A01N031-16; A01N031-08; A01N033-06;
A01N063-02; A01N043-84; A01N043-78

IPCI A01N0065-00 [ICM,7]; A01N0063-02 [ICS,7]; A01N0063-00
[ICS,7]; A01N0065-00 [ICS,7]; A01N0043-84 [ICS,7];
A01N0043-78 [ICS,7]; A01N0043-42 [ICS,7]; A01N0043-38
[ICS,7]; A01N0043-34 [ICS,7,C*]; A01N0037-40 [ICS,7];
A01N0037-38 [ICS,7]; A01N0037-36 [ICS,7,C*];
A01N0035-10 [ICS,7]; A01N0035-04 [ICS,7]; A01N0035-00
[ICS,7,C*]; A01N0033-26 [ICS,7]; A01N0033-10 [ICS,7];
A01N0031-16 [ICS,7]; A01N0031-08 [ICS,7]; A01N0031-00
[ICS,7,C*]; A01N0033-06 [ICS,7]; A01N0033-00
[ICS,7,C*]; A01N0063-02 [ICS,7]; A01N0043-84 [ICS,7];
A01N0043-78 [ICS,7]; A01N0043-72 [ICS,7,C*]

IPCR A01N0063-00 [I,C*]; A01N0063-00 [I,A]; A01N0063-02
[I,C*]; A01N0063-02 [I,A]; A01N0065-00 [I,C*];
A01N0065-00 [I,A]

ECLA A01N063/00+M; A01N063/02+M; A01N065/00+; A01N065/00+M

US 20020102246 IPCI A61K0038-44 [ICM,7]; A61K0038-43 [ICM,7,C*];
A61K0007-00 [ICS,7]

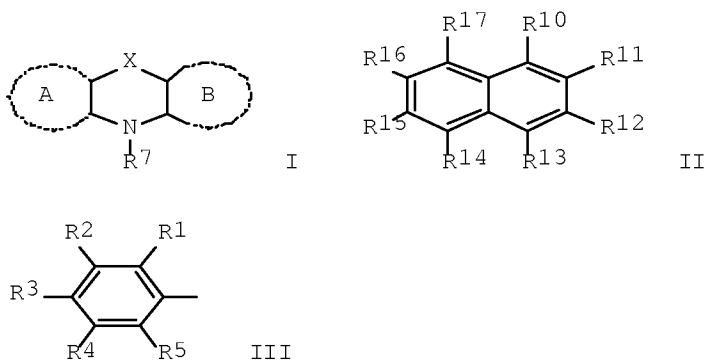
IPCR A01N0063-00 [I,C*]; A01N0063-00 [I,A]

NCL 424/094.400; 424/401.000; 510/320.000

ECLA A01N063/00+M

OTHER SOURCE(S): MARPAT 135:354168

GRAPHIC IMAGE:



ABSTRACT:

An enzymic antimicrobial composition comprises a phenol oxidizing enzyme system and an enhancing agent selected from I, C-X-D, ER6, and II, in which C, D, and E independently of each other are III (R1, R2, R3, R4, R5, R6, R7, R10, R11, R12, R13, R14, R15, R16, R17 = H, OH, C1-8-alkyl, acyl, SO₃H, NO₂, CN, Cl, Br, F, NHR₈, N(R₈)₂, OR₉, C1-8-alkyl-OR₉, or C1-8-alkyl-OOR₉; wherein R₈, R₉ = H, C1-4-alkyl or acyl; X = single bond, NH, NCH₃, NC₂H₅, O, S, N=N, CH=N, or CH=CH; A, B = (un)substituted six membered aromatic rings). The composition is used for killing or inhibiting microbial cells or micro-organisms, e.g. in laundry, on hard surfaces, in water systems, on skin, on teeth or on mucous membranes.

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It is also used for preserving food products, cosmetics, paints, coatings, etc.

SUPPL. TERM: antimicrobial phenol oxidizing enzyme laccase peroxidase
INDEX TERM: Antimicrobial agents
(antimicrobial compns. containing phenol oxidizing enzyme system and enhancing agent)
INDEX TERM: Cosmetics
Laundrying
(antimicrobial compns. containing phenol oxidizing enzyme system and enhancing agent for)
INDEX TERM: Pseudomonas putida
(enzymic antimicrobial composition activity against)
INDEX TERM: Enzymes, biological studies
ROLE: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(phenol oxidizing; antimicrobial composition containing)
INDEX TERM: 7722-84-1, Hydrogen peroxide, biological studies
9003-99-0D, Peroxidase, Bacillus 9003-99-0D, Peroxidase, Coprinus cinereus 9003-99-0D, Peroxidase, Coprinus macrorrhizus 9003-99-0D, Peroxidase, Soybean 80498-15-3D, Laccase,, Coprinus cinereus 80498-15-3D, Laccase,, Polyporus pinsitus 80498-15-3D, Laccase, Pycnoporus cinnabarinus 80498-15-3D, Laccase,, Rhizoctonia solani 173402-34-1, Laccase, prepro-(Scytalidium thermophilum clone pShTh6 gene lccS) 209337-91-7, Laccase (Myceliophthora thermophila)
ROLE: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(antimicrobial composition containing)
INDEX TERM: 83-56-7, 1,5-Naphthalenediol 92-88-6, [1,1'-Biphenyl]-4,4'-diol 123-30-8 343-27-1, Harmine hydrochloride 578-66-5, 8-Quinolinamine 582-17-2, 2,7-Naphthalenediol 836-44-2 ~~884-35-5~~ 889-37-2 1965-09-9 2243-62-1, 1,5-Naphthalenediamine 2283-08-1 2496-15-3 5060-82-2 6369-04-6 7400-08-0, p-Cumalic acid 23517-76-2 25782-99-4 27151-57-1 54827-17-7 57102-94-0 153004-35-4 372188-65-3
ROLE: MOA (Modifier or additive use); ~~USES (Uses)~~
(enhancing agent in enzymic antimicrobial composition containing
phenol oxidizing enzyme)
INDEX TERM: 9003-99-0, Peroxidase
ROLE: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(horseradish; antimicrobial composition containing)
OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009
OS.CITING.REFS: CAPLUS 2003:875036; 2003:22652; 2003:22651; 2003:22650; 2003:22649; 2003:22643
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD.
REFERENCE(S): (1) Busch Alfred; WO 9743383 A 1997 ZCAPLUS
(2) Damhus Ture; WO 9610079 A 1996 ZCAPLUS
(3) Ebdrup Soren; WO 9412619 A 1994 ZCAPLUS
(4) Ebdrup Soren; WO 9412621 A 1994 ZCAPLUS
(5) Henriksen Lotte Rugholm; WO 9741215 A 1997 ZCAPLUS
(6) Novo Nordisk AS; WO 0068324 A 2000 ZCAPLUS
(7) Novonordisk AS; WO 9218683 A 1992 ZCAPLUS
(8) Novonordisk AS; WO 9606930 A 1996 ZCAPLUS

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- (9) Novonordisk AS; WO 9742825 A 1997 ZCAPLUS
(10) Novonordisk AS; WO 9923887 A 1999 ZCAPLUS
(11) Orndorff Steve, A; US 4478683 A 1984

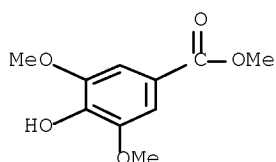
IT 884-35-5

RL: MOA (Modifier or additive use); USES (Uses)

(enhancing agent in enzymic antimicrobial composition containing phenol oxidizing enzyme)

RN 884-35-5 ZCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy-, methyl ester (CA INDEX NAME)



L92 ANSWER 14 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:185033 ZCAPLUS Full-text

DOCUMENT NUMBER: 134:221768

ENTRY DATE: Entered STN: 16 Mar 2001

TITLE: Freshness-retaining agent and its use for
agricultural or horticultural products

INVENTOR(S): Iijima, Yoshihiko

PATENT ASSIGNEE(S): Dainichiseika Color & Chemicals Mfg. Co. Ltd., Japan

SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

INT. PATENT CLASSIF.:

MAIN: A23B007-10
SECONDARY: A23B007-157; A23B007-144; A23B009-18; A23B009-30;
A23B009-26

CLASSIFICATION: 17-4 (Food and Feed Chemistry)
Section cross-reference(s): 5

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1082906	A2	20010314	EP 2000-118268	20000818 <--
EP 1082906	A3	20030813		
EP 1082906	B1	20060816		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CA 2317328	A1	20010310	CA 2000-2317328	20000901 <--
CA 2317328	C	20080108		
ES 2269048	T3	20070401	ES 2000-118268	20000904 <--
CN 1287958	A	20010321	CN 2000-126934	20000908 <--
US 6340654	B1	20020122	US 2000-657904	20000908 <--
TW 228973	B	20050311	TW 2000-89117297	20000927 <--
KR 2005081181	A	20050818	KR 2005-54911	20050624 <--
PRIORITY APPLN. INFO.:			JP 1999-257261	A 19990910 <--
			JP 1999-257262	A 19990910 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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	ECLA	A23B007/10; A23B007/144; A23B007/154; A23B007/157; A23B009/18; A23B009/26; A23B009/30
CA 2317328	IPCI	A01N0003-00 [I,A]; A01N0003-02 [I,A]; A23B0007-10 [I,A]; A23B0007-144 [I,A]; A23B0007-154 [I,A]; A23B0007-157 [I,A]; A23B0007-14 [I,C*]; A23L0003-3463 [I,A]; A23L0003-358 [I,A]; A23L0003-3454 [I,C*]
	IPCR	A23B0007-14 [I,C]; A23B0007-157 [I,A]; A01N0003-00 [I,C]; A01N0003-00 [I,A]; A01N0003-02 [I,A]; A23B0007-10 [I,C]; A23B0007-10 [I,A]; A23B0007-144 [I,C]; A23B0007-144 [I,A]; A23B0007-154 [I,A]; A23B0009-00 [I,C*]; A23B0009-18 [I,A]; A23B0009-26 [I,A]; A23B0009-30 [I,A]; A23L0003-3454 [I,C]; A23L0003-3463 [I,C]; A23L0003-3463 [I,A]; A23L0003-358 [I,A]
	ECLA	A23B007/10; A23B007/144; A23B007/154; A23B007/157; A23B009/18; A23B009/26; A23B009/30
	IPCI	A23B0007-10 [I,C]; A23B0007-10 [I,A]; A01N0003-00 [I,C]; A01N0003-00 [I,A]; A23B0007-14 [I,C]; A23B0007-144 [I,C]; A23B0007-144 [I,A]; A23B0007-157 [I,A]; A23B0009-00 [I,C]; A23B0009-18 [I,A]; A23B0009-26 [I,A]; A23B0009-30 [I,A]; A23L0003-34 [I,C]; A23L0003-3418 [I,A]; A23L0003-3445 [I,A]; B65D0081-28 [I,C]; B65D0081-28 [I,A]
	IPCR	A23B0007-10 [I,C]; A23B0007-10 [I,A]; A01N0003-00 [I,C]; A01N0003-00 [I,A]; A23B0007-14 [I,C]; A23B0007-144 [I,C]; A23B0007-144 [I,A]; A23B0007-154 [I,A]; A23B0007-157 [I,A]; A23B0009-00 [I,C]; A23B0009-18 [I,A]; A23B0009-26 [I,A]; A23B0009-30 [I,A]; A23L0003-34 [I,C]; A23L0003-3418 [I,A]; A23L0003-3445 [I,A]; B65D0081-28 [I,C]; B65D0081-28 [I,A]
ES 2269048	ECLA	A23B007/10; A23B007/144; A23B007/154; A23B007/157; A23B009/18; A23B009/26; A23B009/30
	IPCI	A23B0007-10 [I,C]; A23B0007-10 [I,A]; A01N0003-00 [I,C]; A01N0003-00 [I,A]; A23B0007-14 [I,C]; A23B0007-144 [I,C]; A23B0007-144 [I,A]; A23B0007-157 [I,A]; A23B0009-00 [I,C]; A23B0009-18 [I,A]; A23B0009-26 [I,A]; A23B0009-30 [I,A]; A23L0003-34 [I,C]; A23L0003-3418 [I,A]; A23L0003-3445 [I,A]; B65D0081-28 [I,C]; B65D0081-28 [I,A]
	IPCR	A23B0007-10 [I,C]; A23B0007-10 [I,A]; A01N0003-00 [I,C]; A01N0003-00 [I,A]; A23B0007-14 [I,C]; A23B0007-144 [I,C]; A23B0007-144 [I,A]; A23B0007-154 [I,A]; A23B0007-157 [I,A]; A23B0009-00 [I,C]; A23B0009-18 [I,A]; A23B0009-26 [I,A]; A23B0009-30 [I,A]; A23L0003-34 [I,C]; A23L0003-3418 [I,A]; A23L0003-3445 [I,A]; B65D0081-28 [I,C]; B65D0081-28 [I,A]
	ECLA	A23B007/10; A23B007/144; A23B007/154; A23B007/157; A23B009/18; A23B009/26; A23B009/30
	IPCI	B65D0081-28 [ICM,7]; A23B0007-10 [ICS,7]; A23B0071-48 [ICS,7]
CN 1287958	IPCR	A23B0007-10 [I,C*]; A23B0007-10 [I,A]; A23B0007-14 [I,C*]; A23B0007-144 [I,C*]; A23B0007-144 [I,A]; A23B0007-154 [I,A]; A23B0007-157 [I,A]; A23B0009-00 [I,C*]; A23B0009-18 [I,A]; A23B0009-26 [I,A]; A23B0009-30 [I,A]
	ECLA	A23B007/10; A23B007/144; A23B007/154; A23B007/157; A23B009/18; A23B009/26; A23B009/30
	IPCI	A01N0003-02 [ICM,7]; A01N0003-00 [ICM,7,C*]; A23B0007-144 [ICS,7]; A23B0007-153 [ICS,7]; A23B0007-14 [ICS,7,C*]
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	ECLA	A23B007/10; A23B007/144; A23B007/154; A23B007/157; A23B009/18; A23B009/26; A23B009/30
US 6340654	IPCI	A01N0003-02 [ICM,7]; A01N0003-00 [ICM,7,C*]; A23B0007-144 [ICS,7]; A23B0007-153 [ICS,7]; A23B0007-14 [ICS,7,C*]
	IPCR	A23B0007-144 [ICS,7]; A23B0007-153 [ICS,7]; A23B0007-14 [ICS,7,C*]
	ECLA	A23B007/10; A23B007/144; A23B007/154; A23B007/157; A23B009/18; A23B009/26; A23B009/30
	IPCI	A01N0003-02 [ICM,7]; A01N0003-00 [ICM,7,C*]; A23B0007-144 [ICS,7]; A23B0007-153 [ICS,7]; A23B0007-14 [ICS,7,C*]
	IPCR	A23B0007-144 [ICS,7]; A23B0007-153 [ICS,7]; A23B0007-14 [ICS,7,C*]

TW 228973 IPCR A23B0007-10 [I,C*]; A23B0007-10 [I,A]; A23B0007-14
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 A23B0007-154 [I,A]; A23B0007-157 [I,A]; A23B0009-00
 [I,C*]; A23B0009-18 [I,A]; A23B0009-26 [I,A];
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 NCL 504/114.000; 426/312.000; 426/477.000; 426/562.000
 ECLA A23B007/10; A23B007/144; A23B007/154; A23B007/157;
 A23B009/18; A23B009/26; A23B009/30
 KR 2005081181 IPCI A01N0003-02 [ICS,7]; A01N0003-00 [ICS,7,C*];
 A23B0007-10 [ICS,7]
 IPCR A23B0007-10 [I,C*]; A23B0007-10 [I,A]; A23B0007-14
 [I,C*]; A23B0007-144 [I,C*]; A23B0007-144 [I,A];
 A23B0007-154 [I,A]; A23B0007-157 [I,A]; A23B0009-00
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 A23B009/18; A23B009/26; A23B009/30
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 ECLA A23B007/10; A23B007/144; A23B007/154; A23B007/157;
 A23B009/18; A23B009/26; A23B009/30

ABSTRACT:

A freshness-retaining agent for an agricultural or horticultural product
 comprises an organic acid and a hydrogen carbonate. The organic acid may preferably
 be an organic acid which in the presence of water given off from the
 agricultural or horticultural product, reacts with the hydrogen carbonate
 such that carbon dioxide gas is gradually generated, for example, cinnamic
 acid, benzoic acid or citric acid or a derivative thereof. The hydrogen carbonate
 may preferably be sodium bicarbonate. The freshness of the agricultural or
 horticultural product can be retained by causing the freshness-retaining agent
 to exist in the same atmosphere as the agricultural or horticultural product such
 that the freshness-retaining agent is allowed to gradually generate carbon
 dioxide gas in the presence of water given off from the agricultural or
 horticultural product.

SUPPL. TERM: food horticulture plant freshness carboxylate bicarbonate
 INDEX TERM: Polymers, biological studies
 ROLE: AGR (Agricultural use); FFD (Food or feed use); BIOL
 (Biological study); USES (Uses)
 (acidic group-containing; freshness-retaining agent and its
 use for agricultural or horticultural products)
 INDEX TERM: Plant (Embryophyta)
 (edible; freshness-retaining agent and its use for
 agricultural or horticultural products)
 INDEX TERM: Phosphates, biological studies
 Sulfates, biological studies
 ROLE: AGR (Agricultural use); FFD (Food or feed use); BIOL
 (Biological study); USES (Uses)
 (esters, polymers containing; freshness-retaining agent and
 its use for agricultural or horticultural
 products)
 INDEX TERM: Apple
 Crop (plant)
 Food preservation
 Plant (Embryophyta)
 (freshness-retaining agent and its use for
 agricultural or horticultural products)
 INDEX TERM: Bicarbonates
 Carboxylic acids, biological studies
 ROLE: AGR (Agricultural use); FFD (Food or feed use); BIOL
 (Biological study); USES (Uses)

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(freshness-retaining agent and its use for
agricultural or horticultural products)

INDEX TERM: Food
(plant products; freshness-retaining agent and
its use for agricultural or horticultural
products)

INDEX TERM: Carboxyl group
(polymers containing; freshness-retaining agent and its use
for agricultural or horticultural products)

INDEX TERM: Sulfonates
ROLE: AGR (Agricultural use); FFD (Food or feed use); BIOL
(Biological study); USES (Uses)
(polymers containing; freshness-retaining agent and its use
for agricultural or horticultural products)

INDEX TERM: 56-86-0, L-Glutamic acid, biological studies 59-67-6,
Nicotinic acid, biological studies 65-85-0, Benzoic acid,
biological studies 69-72-7, Salicylic acid, biological
studies 77-92-9, Citric acid, biological studies
97-65-4, Itaconic acid, biological studies 110-44-1,
Sorbic acid 112-38-9, Undecylenic acid 121-34-6,
Vanillic acid 124-04-9, Adipic acid, biological studies
144-33-2, Disodium citrate 144-55-8, Sodium bicarbonate,
biological studies 331-39-5, Caffeic acid
530-57-4, Syringic acid 621-82-9, Cinnamic acid,
biological studies 1135-24-6, Ferulic acid 7400-08-0,
p-Coumaric acid 18996-35-5, Monosodium citrate
ROLE: AGR (Agricultural use); FFD (Food or feed
use); BIOL (Biological study); USES (Uses)
(freshness-retaining agent and its use for
agricultural or horticultural products)

INDEX TERM: 124-38-9, Carbon dioxide, biological studies
ROLE: BSU (Biological study, unclassified); MFM (Metabolic
formation); BIOL (Biological study); FORM (Formation,
nonpreparative)
(freshness-retaining agent and its use for
agricultural or horticultural products)

INDEX TERM: 7732-18-5, Water, biological studies
ROLE: BSU (Biological study, unclassified); MFM (Metabolic
formation); RCT (Reactant); BIOL (Biological study); FORM
(Formation, nonpreparative); RACT (Reactant or reagent)
(freshness-retaining agent and its use for
agricultural or horticultural products)

INDEX TERM: 110-17-8, Fumaric acid, biological studies 298-14-6,
Potassium bicarbonate 1066-33-7, Ammonium bicarbonate
9003-01-4, Polyacrylic acid
ROLE: FFD (Food or feed use); BIOL (Biological study); USES
(Uses)
(freshness-retaining agent and its use for
agricultural or horticultural products)

INDEX TERM: 74-85-1, Ethylene, processes
ROLE: REM (Removal or disposal); PROC (Process)
(freshness-retaining agent and its use for
agricultural or horticultural products)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1
CITINGS)

DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009

OS.CITING.REFS: CAPLUS 2004:203341

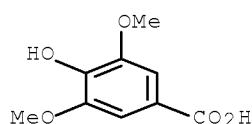
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS
RECORD.

REFERENCE(S): (1) Anon; EP 0845262 A1 ZCAPLUS

10/810211

- (2) Anon; GB 1442979 A ZCAPLUS
- (3) Anon; US 2500919 A ZCAPLUS
- (4) Anon; US 3891756 A ZCAPLUS
- (5) Anon; US 4032374 A ZCAPLUS
- (6) Anon; US 4777033 A ZCAPLUS
- (7) Anon; US 5489399 A ZCAPLUS
- (8) Anon; US 6083535 A ZCAPLUS
- (9) Anon; WO 9745103 A1 ZCAPLUS

IT 530-57-4, Syringic acid
RL: AGR (Agricultural use); FFD (Food or feed use); BIOL
(Biological study); USES (Uses)
(freshness-retaining agent and its use for agricultural or
horticultural products)
RN 530-57-4 ZCAPLUS
CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



L92 ANSWER 15 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:152427 ZCAPLUS Full-text
DOCUMENT NUMBER: 134:174268
ENTRY DATE: Entered STN: 02 Mar 2001
TITLE: Insecticides and microbicides for plants
INVENTOR(S): Schuer, Joerg
PATENT ASSIGNEE(S): Germany
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
INT. PATENT CLASSIF.:
MAIN: A01N031-04
SECONDARY: A01N037-40; A01N031-04; A01N065-00; A01N037-40;
A01N037-36; A01N031-02; A01N037-40; A01N065-00;
A01N037-36; A01N031-04; A01N031-02
CLASSIFICATION: 5-4 (Agrochemical Bioregulators)
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001013727	A1	20010301	WO 2000-EP8344	20000825 <--
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
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CA 2382740	A1	20010301	CA 2000-2382740	20000825 <--

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EP 1206184	A1	20020522	EP 2000-969251	20000825 <--
EP 1206184	B1	20050119		
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AU 778900	B2	20041223	AU 2000-79038	20000825 <--
AT 287211	T	20050215	AT 2000-969251	20000825 <--
ES 2235960	T3	20050716	ES 2000-969251	20000825 <--
ZA 2002001510	A	20030311	ZA 2002-1510	20020222 <--
US 20080045587	A1	20080221	US 2007-780408	20070719 <--
PRIORITY APPLN. INFO.:			DE 1999-19940283	A 19990825 <--
			WO 2000-EP8344	W 20000825 <--
			US 2002-69476	B1 20020701 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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	ICS	A01N037-40; A01N031-04; A01N065-00; A01N037-40; A01N037-36; A01N031-02; A01N037-40; A01N065-00; A01N037-36; A01N031-04; A01N031-02
	IPCI	A01N0031-04 [ICM,7]; A01N0037-40 [ICS,7]; A01N0031-04 [ICS,7]; A01N0065-00 [ICS,7]; A01N0037-36 [ICS,7]; A01N0031-02 [ICS,7]; A01N0031-00 [ICS,7,C*]
	IPCR	A01N0025-02 [I,C*]; A01N0025-02 [I,A]; A01N0031-00 [I,C*]; A01N0031-04 [I,A]; A01N0031-16 [I,A]; A01N0037-36 [I,C*]; A01N0037-40 [I,A]; A01N0065-00 [I,C]; A01N0065-00 [I,A]
DE 19940283	ECLA	A01N031/04+M; A01N037/40+M
	IPCI	A01N0031-08 [ICM,7]; A01N0031-00 [ICM,7,C*]
	IPCR	A01N0025-02 [I,C*]; A01N0025-02 [I,A]; A01N0031-00 [I,C*]; A01N0031-04 [I,A]; A01N0031-16 [I,A]; A01N0037-36 [I,C*]; A01N0037-40 [I,A]; A01N0065-00 [I,C*]; A01N0065-00 [I,A]
CA 2382740	ECLA	A01N031/04+M; A01N037/40+M
	IPCI	A01N0031-04 [ICM,7]; A01N0065-00 [ICS,7]; A01N0031-02 [ICS,7]; A01N0031-00 [ICS,7,C*]; A01N0037-36 [ICS,7]; A01N0037-40 [ICS,7]
	IPCR	A01N0025-02 [I,C*]; A01N0025-02 [I,A]; A01N0031-00 [I,C*]; A01N0031-04 [I,A]; A01N0031-16 [I,A]; A01N0037-36 [I,C*]; A01N0037-40 [I,A]; A01N0065-00 [I,C]; A01N0065-00 [I,A]
EP 1206184	ECLA	A01N031/04+M; A01N037/40+M
	IPCI	A01N0031-04 [ICM,6]; A01N0037-40 [ICS,6]; A01N0031-04 [ICI,6]; A01N0065-00 [ICI,6]; A01N0037-40 [ICI,6]; A01N0037-36 [ICI,6]; A01N0037-40 [ICI,6]; A01N0065-00 [ICI,6]; A01N0037-36 [ICI,6]; A01N0031-04 [ICI,6]; A01N0031-02 [ICI,6]; A01N0031-00 [ICI,6,C*]
	IPCR	A01N0025-02 [I,C*]; A01N0025-02 [I,A]; A01N0031-00 [I,C*]; A01N0031-04 [I,A]; A01N0031-16 [I,A]; A01N0037-36 [I,C*]; A01N0037-40 [I,A]; A01N0065-00 [I,C]; A01N0065-00 [I,A]
JP 2003507397	ECLA	A01N031/04+M; A01N037/40+M
	IPCI	A01N0025-02 [ICM,7]; A01N0031-04 [ICS,7]; A01N0031-16 [ICS,7]; A01N0031-00 [ICS,7,C*]; A01N0065-00 [ICS,7]
	IPCR	A01N0025-02 [I,C*]; A01N0025-02 [I,A]; A01N0031-00 [I,C*]; A01N0031-04 [I,A]; A01N0031-16 [I,A]; A01N0037-36 [I,C*]; A01N0037-40 [I,A]; A01N0065-00 [I,C]; A01N0065-00 [I,A]
AU 778900	ECLA	A01N031/04+M; A01N037/40+M
	IPCI	A01N0031-04 [ICM,7]; A01N0031-02 [ICS,7]; A01N0031-00

[ICS,7,C*]; A01N0037-36 [ICS,7]; A01N0037-40 [ICS,7];
A01N0065-00 [ICS,7]
IPCR A01N0025-02 [I,C*]; A01N0025-02 [I,A]; A01N0031-00
[I,C*]; A01N0031-04 [I,A]; A01N0031-16 [I,A];
A01N0037-36 [I,C*]; A01N0037-40 [I,A]; A01N0065-00
[I,C]; A01N0065-00 [I,A]
ECLA A01N031/04+M; A01N037/40+M
AT 287211 IPCI A01N0031-04 [ICM,7]; A01N0031-00 [ICM,7,C*];
A01N0037-40 [ICS,7]; A01N0065-00 [ICS,7]; A01N0037-36
[ICS,7]
IPCR A01N0025-02 [I,C*]; A01N0025-02 [I,A]; A01N0031-00
[I,C*]; A01N0031-04 [I,A]; A01N0031-16 [I,A];
A01N0037-36 [I,C*]; A01N0037-40 [I,A]; A01N0065-00
[I,C]; A01N0065-00 [I,A]
ECLA A01N031/04+M; A01N037/40+M
ES 2235960 IPCI A01N0031-04 [ICM,7]; A01N0037-40 [ICS,7]; A01N0065-00
[ICS,7]; A01N0037-36 [ICS,7]; A01N0031-02 [ICS,7];
A01N0031-00 [ICS,7,C*]
IPCR A01N0025-02 [I,C*]; A01N0025-02 [I,A]; A01N0031-00
[I,C*]; A01N0031-04 [I,A]; A01N0031-16 [I,A];
A01N0037-36 [I,C*]; A01N0037-40 [I,A]; A01N0065-00
[I,C]; A01N0065-00 [I,A]
ECLA A01N031/04+M; A01N037/40+M
ZA 2002001510 IPCI A01N [ICM,7]
IPCR A01N0025-02 [I,C*]; A01N0025-02 [I,A]; A01N0031-00
[I,C*]; A01N0031-04 [I,A]; A01N0031-16 [I,A];
A01N0037-36 [I,C*]; A01N0037-40 [I,A]; A01N0065-00
[I,C]; A01N0065-00 [I,A]
ECLA A01N031/04+M; A01N037/40+M
US 20080045587 IPCI A01N0043-16 [I,A]; A01N0043-02 [I,C*]; A01N0031-00
[I,A]; A01P0001-00 [I,A]
IPCR A01N0025-02 [I,C*]; A01N0025-02 [I,A]; A01N0043-02
[I,C]; A01N0043-16 [I,A]; A01N0031-00 [I,C];
A01N0031-00 [I,A]; A01N0031-04 [I,A]; A01N0031-16
[I,A]; A01N0037-36 [I,C*]; A01N0037-40 [I,A];
A01N0065-00 [I,C]; A01N0065-00 [I,A]; A01P0001-00
[I,C]; A01P0001-00 [I,A]
NCL 514/460.000; 514/730.000
ECLA A01N031/04+M; A01N037/40+M

ABSTRACT:

The invention relates to agents for protecting plants and/or parts of plants from insects and insect larvae and from microbial attack. The agents are lipophilic GRAS (generally recognized as safe) flavoring compds and hydrophilic GRAS. The lipophilic GRAS flavoring compds. are alcs. (benzyl alc., 1- or 2-phenylethanol, cinnamic alc., hydrocinnamic alc., etc.). The hydrophilic GRAS agents are alcs. (ethanol, propanol, isopropanol, etc.) or organic acids.

SUPPL. TERM: GRAS flavoring agent insecticide microbicide plant
INDEX TERM: Flavoring materials
(GRAS; insecticides and microbicides
for plants or plant parts)
INDEX TERM: Camellia primula
(extract; insecticides and microbicides
for plants or plant parts)
INDEX TERM: Tannins
ROLE: AGR (Agricultural use); BIOL (Biological study); USES
(Uses)
(insecticide and microbicide for
plants or plant parts)

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INDEX TERM: Antibacterial agents
Cereal (grain)
Cocoa (Theobroma cacao)
Coffee (Coffea)
Corn
Cotton
Fruit tree
Insecticides
Legume (Fabaceae)
Nut (seed)
Potato (Solanum tuberosum)
Rice (Oryza sativa)
Seed
Spices
Tea (Camellia sinensis)
Tobacco
(insecticides and microbicides for
plants or plant parts)

INDEX TERM: Acetals
Alcohols, biological studies
Aldehydes, biological studies
Anthocyanins
Essential oils
Flavanols
Flavones
Flavonoids
Phenols, biological studies
Terpenes, biological studies
ROLE: AGR (Agricultural use); BIOL (Biological study); USES
(Uses)
(insecticides and microbicides for
plants or plant parts)

INDEX TERM: Esters, biological studies
ROLE: AGR (Agricultural use); BIOL (Biological study); USES
(Uses)
(lipophilic; insecticides and
microbicides for plants or
plant parts)

INDEX TERM: Acids, biological studies
ROLE: AGR (Agricultural use); BIOL (Biological study); USES
(Uses)
(organic; insecticides and microbicides
for plants or plant parts)

INDEX TERM: Plant (Embryophyta)
(ornamental; insecticides and
microbicides for plants or
plant parts)

INDEX TERM: Phenols, biological studies
ROLE: AGR (Agricultural use); BIOL (Biological study); USES
(Uses)
(polyphenols, nonpolymeric; insecticide and
microbicide for plants or plant
parts)

INDEX TERM: 50-21-5, Lactic acid, biological studies 56-81-5,
Glycerol, biological studies 57-55-6, Propylene glycol,
biological studies 60-12-8, 2-Phenylethanol 62-54-4,
Calcium acetate 64-17-5, (Ethanol, biological studies
64-18-6, Formic acid, biological studies 64-19-7, Acetic
acid, biological studies 67-63-0, Isopropanol, biological
studies 71-23-8, Propanol, biological studies 71-36-3,

Butanol, biological studies 71-41-0, Amyl alcohol, biological studies 77-92-9, Citric acid, biological studies 78-70-6, Linalool 78-83-1, Isobutanol, biological studies 87-69-4, Tartaric acid, biological studies 90-64-2, Mandelic acid 93-54-9, 1-Phenyl-1-propanol 98-01-1, Furfurol, biological studies 98-85-1, 1-Phenylethanol 100-51-6, (Benzyl alcohol, biological studies 102-76-1, Triacetin 103-82-2, Phenylacetic acid, biological studies 104-54-1, Cinnamic alcohol 105-13-5, Anisic alcohol 106-22-9, Citronellol 106-24-1, Geraniol 110-17-8, Fumaric acid, biological studies 111-27-3, Hexyl alcohol, biological studies 111-70-6, Heptyl alcohol 111-87-5, Octyl alcohol, biological studies 112-30-1, Decanol 112-43-6, 10-Undecenol 112-53-8, 1-Dodecanol 121-33-5, Vanillin 122-97-4, Hydrocinnamic alcohol 123-38-6, Propionaldehyde, biological studies 123-51-3, IsoAmyl alcohol 127-08-2, Potassium acetate 127-09-3, Sodium acetate 142-50-7, Nerolidol 143-08-8, Nonyl alcohol 470-82-6, Cineol 499-12-7, Aconitic acid 507-70-0, Borneol 513-86-0, Acetoin 536-60-7, Cuminy alcohol 539-86-6, Allicin 2216-51-5 6812-78-8, Rhodinol 6915-15-7, Malic acid 8000-41-7, Terpeneol 36653-82-4, 1-Hexadecanol 186209-48-3, Nonadienol

ROLE: AGR (Agricultural use); BIOL (Biological study); USES (Uses)

(insecticide and microbicide for plants or plant parts)

INDEX TERM: 87-66-1, Pyrogallol 108-46-3, Resorcinol, biological studies 108-73-6, Phloroglucinol 109-52-4, Valeric acid, biological studies 110-82-7, Cyclohexane, biological studies 112-05-0, Pelargonic acid 120-80-9, Pyrocatechol, biological studies 122-59-8, Phenoxyacetic acid 123-31-9, Hydroquinone, biological studies 124-04-9, Adipic acid, biological studies 125-46-2, Usnic acid 142-62-1, Capronic acid, biological studies 149-91-7D, Gallic acid, derivs. 331-39-5, Caffeic acid 501-36-0, Resveratrol 503-74-2, IsoValeric acid 621-82-9, Cinnamic acid, biological studies 9005-53-2, Lignin, biological studies

ROLE: AGR (Agricultural use); BIOL (Biological study); USES (Uses)

(insecticides and microbicides for plants or plant parts)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009

OS.CITING.REFS: CAPLUS 2008:1002765; 2002:885967

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD.

REFERENCE(S): (1) Anon; PATENT ABSTRACTS OF JAPAN 1998, V1998(14)
 (2) Dainippon; JP 10259103 A 1998 ZCAPLUS
 (3) Delpech, L; FR 2228434 A 1974 ZCAPLUS
 (4) Doi, K; JP 04069308 A 1992 ZCAPLUS
 (5) Ecosmart Technologies Inc; WO 9854971 A 1998 ZCAPLUS
 (6) McCormac Dennis J Doing Busine; WO 9531100 A 1995 ZCAPLUS
 (7) Menno Chemie Vertriebsges Mbh; WO 0027192 A 2000
 (8) Nakano Sumese Kk; JP 04316506 A 1992 ZCAPLUS
 (9) Rod, R; US 5814325 A 1998 ZCAPLUS

10/810211

- (10) Schuer, J; WO 9629895 A 1996 ZCAPLUS
- (11) Schuer, J; WO 9858540 A 1998 ZCAPLUS
- (12) Schuer, J; WO 0003612 A 2000
- (13) Shioi, K; JP 46028797 B
- (14) Sterling Drug Inc; CA 2012288 A 1990 ZCAPLUS
- (15) Thorsell, W; SE 8900902 A 1989 ZCAPLUS

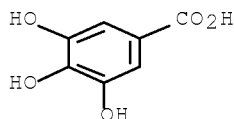
IT 149-91-7D, Gallic acid, derivs.

RL: AGR (Agricultural use); BIOL (Biological study); USES
(Uses)

(insecticides and microbicides for plants
or plant parts)

RN 149-91-7 ZCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy- (CA INDEX NAME)



L92 ANSWER 16 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:106343 ZCAPLUS Full-text

DOCUMENT NUMBER: 134:158825

ENTRY DATE: Entered STN: 13 Feb 2001

TITLE: Antibacterial materials, deodorants, repellents, and
dehumidifying materials

INVENTOR(S): Shimada, Tsumoru; Ikuma, Kazuhito; Inamoto, Tetsuya

PATENT ASSIGNEE(S): Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

INT. PATENT CLASSIF.:

MAIN: A01N059-16
SECONDARY: A01N059-16; A01N025-08; A01N059-06; A01N059-20;
A61L009-01; C09K015-00

CLASSIFICATION: 5-2 (Agrochemical Bioregulators)

Section cross-reference(s): 17, 59, 60

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001039809	A	20010213	JP 1999-246049	19990727 <--
PRIORITY APPLN. INFO.:			JP 1999-246049	19990727 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2001039809	ICM	A01N059-16
	ICS	A01N059-16; A01N025-08; A01N059-06; A01N059-20; A61L009-01; C09K015-00
	IPCI	A01N0059-16 [ICM, 7]; A01N0059-16 [ICS, 7]; A01N0025-08 [ICS, 7]; A01N0059-06 [ICS, 7]; A01N0059-20 [ICS, 7]; A61L0009-01 [ICS, 7]; C09K0015-00 [ICS, 7]
	IPCR	A61L0009-01 [I,C*]; A61L0009-01 [I,A]; A01N0025-08 [I,C*]; A01N0025-08 [I,A]; A01N0059-06 [I,C*];

A01N0059-06 [I,A]; A01N0059-16 [I,C*]; A01N0059-16
 [I,A]; A01N0059-20 [I,A]; C09K0015-00 [I,C*];
 C09K0015-00 [I,A]

ABSTRACT:

The materials are ~~rice~~ husk carbon which are mixed with solns. containing metal-fixing agents and/or antioxidants and metals and dried. ~~Rice~~ husk carbon was mixed with an aqueous solution containing CuSO₄, Zn(NO₃)₂, EDTA-4Na, and lauryldiaminoethylglycine Na (Nissan Anon LG) and dried to give a material, which totally controlled Staphylococcus aureus and Escherichia coli.

SUPPL. TERM: ~~rice~~ husk carbon metal bactericide deodorant;
 antioxidant metal bactericide repellent ~~rice~~ husk;
 recycling waste ~~rice~~ husk bactericide deodorant; air
 deodorization dehumidification ~~rice~~ husk carbon

INDEX TERM: Tocopherols
 ROLE: BUU (Biological use, unclassified); TEM (Technical or
 engineered material use); BIOL (Biological study); USES
 (Uses)
 (antioxidant; ~~rice~~ husk carbon mixed with
 metals for antibacterial, deodorant, repellent, and
 dehumidifying materials)

INDEX TERM: Air conditioning
 (dehumidification; ~~rice~~ husk carbon mixed with
 metals for antibacterial, deodorant, repellent, and
 dehumidifying materials)

INDEX TERM: Air purification
 (deodorization; ~~rice~~ husk carbon mixed with
 metals for antibacterial, deodorant, repellent, and
 dehumidifying materials)

INDEX TERM: Wastes
 (food-processing, ~~rice~~ husk; ~~rice~~
 husk carbon mixed with metals for antibacterial,
 deodorant, repellent, and dehumidifying materials)

INDEX TERM: Rice (Oryza sativa)
 (husk; ~~rice~~ husk carbon mixed with metals for
 antibacterial, deodorant, repellent, and dehumidifying
 materials)

INDEX TERM: Carboxylic acids, biological studies
 ROLE: BUU (Biological use, unclassified); TEM (Technical or
 engineered material use); BIOL (Biological study); USES
 (Uses)
 (metal-fixing agents; ~~rice~~ husk carbon mixed
 with metals for antibacterial, deodorant, repellent, and
 dehumidifying materials)

INDEX TERM: Antibacterial agents
 Antioxidants
 Chelating agents
 Deodorants
 Insect repellents
 (~~rice~~ husk carbon mixed with metals for
 antibacterial, deodorant, repellent, and dehumidifying
 materials)

INDEX TERM: Metals, biological studies
 ROLE: BAC (Biological activity or effector, except adverse);
 BSU (Biological study, unclassified); BUU (Biological use,
 unclassified); TEM (Technical or engineered material use);
 BIOL (Biological study); USES (Uses)
 (~~rice~~ husk carbon mixed with metals for
 antibacterial, deodorant, repellent, and dehumidifying
 materials)

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INDEX TERM: Chaff
(rice husk; rice husk carbon mixed
with metals for antibacterial, deodorant, repellent, and
dehumidifying materials)

INDEX TERM: Charcoal
ROLE: BUU (Biological use, unclassified); TEM (Technical or
engineered material use); BIOL (Biological study); USES
(Uses)
(rice husk; rice husk carbon mixed
with metals for antibacterial, deodorant, repellent, and
dehumidifying materials)

INDEX TERM: Food processing
(wastes, rice husk; rice husk carbon
mixed with metals for antibacterial, deodorant,
repellent, and dehumidifying materials)

INDEX TERM: 50-81-7, Ascorbic acid, biological studies 89-65-6,
Isoascorbic acid 96-27-5, Thioglycerol 121-79-9
, Propyl gallate 7681-57-4, Sodium pyrosulfite
7757-83-7, Sodium sulfite 7772-98-7, Sodium thiosulfate
10117-38-1, Potassium sulfite 16731-55-8, Potassium
pyrosulfite 24531-57-5, Thiosorbitol 25013-16-5,
Butylhydroxyanisole 30587-81-6, Dibutylhydroxytoluene
ROLE: BUU (Biological use, unclassified); TEM (Technical or
engineered material use); BIOL (Biological study); USES
(Uses)
(antioxidant; rice husk carbon mixed with
metals for antibacterial, deodorant, repellent, and
dehumidifying materials)

INDEX TERM: 56-84-8, Aspartic acid, biological studies 56-86-0,
Glutamic acid, biological studies 60-00-4, EDTA,
biological studies 64-02-8, EDTA tetrasodium salt
77-92-9, Citric acid, biological studies 110-15-6,
Succinic acid, biological studies 110-16-7, Maleic acid,
biological studies 141-82-2, Malonic acid, biological
studies 144-62-7, Oxalic acid, biological studies
18694-07-0, Hexametaphosphoric acid
ROLE: BUU (Biological use, unclassified); TEM (Technical or
engineered material use); BIOL (Biological study); USES
(Uses)
(metal-fixing agent; rice husk carbon mixed
with metals for antibacterial, deodorant, repellent, and
dehumidifying materials)

INDEX TERM: 74-93-1, Methyl mercaptan, processes 7664-41-7, Ammonia,
processes 7783-06-4, Hydrogen sulfide, processes
ROLE: REM (Removal or disposal); PROC (Process)
(removal of; rice husk carbon mixed with metals
for antibacterial, deodorant, repellent, and
dehumidifying materials)

INDEX TERM: 7429-90-5, Aluminum, biological studies 7439-89-6, Iron,
biological studies 7439-92-1, Lead, biological studies
7439-96-5, Manganese, biological studies 7440-02-0,
Nickel, biological studies 7440-22-4, Silver, biological
studies 7440-31-5, Tin, biological studies 7440-32-6,
Titanium, biological studies 7440-48-4, Cobalt, biological
studies 7440-50-8, Copper, biological studies 7440-66-6,
Zinc, biological studies 7440-67-7, Zirconium, biological
studies 7440-69-9, Bismuth, biological studies
7758-98-7, Cupric sulfate, biological studies 7779-88-6,
Zinc nitrate 10377-66-9, Manganese dinitrate 10421-48-4,
Ferric nitrate

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ROLE: BAC (Biological activity or effector, except adverse);
BSU (Biological study, unclassified); BUU (Biological use,
unclassified); TEM (Technical or engineered material use);
BIOL (Biological study); USES (Uses)

(~~rice~~ husk carbon mixed with metals for
antibacterial, deodorant, repellent, and dehumidifying
materials)

INDEX TERM: 7440-44-0, Carbon, biological studies

ROLE: BUU (Biological use, unclassified); TEM (Technical or
engineered material use); BIOL (Biological study); USES
(Uses)

(~~rice~~ husk; ~~rice~~ husk carbon mixed
with metals for antibacterial, deodorant, repellent, and
dehumidifying materials)

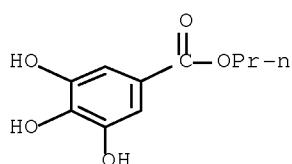
IT 121-79-9, Propyl gallate

RL: BUU (Biological use, unclassified); TEM (Technical or engineered
material use); BIOL (Biological study); ~~USES~~ (Uses)

(antioxidant; ~~rice~~ husk carbon mixed with metals for
antibacterial, deodorant, repellent, and dehumidifying materials)

RN 121-79-9 ZCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, propyl ester (CA INDEX NAME)



L92 ANSWER 17 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:842294 ZCAPLUS Full-text

DOCUMENT NUMBER: 134:1333

ENTRY DATE: Entered STN: 01 Dec 2000

TITLE: Improved method for ~~agrobacterium~~ mediated
transformation of cotton

INVENTOR(S): Reynaerts, Arlette; De Sonville, Anne

PATENT ASSIGNEE(S): Aventis CropScience NV, Belg.

SOURCE: PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

INT. PATENT CLASSIF.:

MAIN: C12N015-82

CLASSIFICATION: 3-1 (Biochemical Genetics)

Section cross-reference(s): 9, 11

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2000071733	A1	20001130	WO 2000-EP4611	20000518 <--
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,			

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LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
BR 2000010749 A 20020219 BR 2000-10749 20000518 <--
EP 1183377 A1 20020306 EP 2000-936770 20000518 <--
EP 1183377 B1 20070620
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE,
SI, LT, LV, FI, RO, CY
TR 200103311 T2 20020422 TR 2001-3311 20000518 <--
AU 772686 B2 20040506 AU 2000-52148 20000518 <--
CN 1234869 C 20060104 CN 2000-807727 20000518 <--
AT 365218 T 20070715 AT 2000-936770 20000518 <--
ES 2288478 T3 20080116 ES 2000-936770 20000518 <--
US 6483013 B1 20021119 US 2000-573555 20000519 <--
MX 2001011871 A 20030904 MX 2001-11871 20011116 <--
ZA 2001009521 A 20021119 ZA 2001-9521 20011119 <--
IN 2001CN01741 A 20070420 IN 2001-CN1741 20011211 <--
PRIORITY APPLN. INFO.:
US 1999-219317P P 19990519 <--
US 1999-314449 A 19990519 <--
WO 2000-EP4611 W 20000518 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000071733	ICM	C12N015-82
	IPCI	C12N0015-82 [ICM,7]
	IPCR	C12N0015-82 [I,C*]; C12N0015-82 [I,A]
	ECLA	C12N015/82A4B
BR 2000010749	IPCI	C12N0015-82 [ICM,7]
	IPCR	C12N0015-82 [I,C*]; C12N0015-82 [I,A]
	ECLA	C12N015/82A4B
EP 1183377	IPCI	C12N0015-82 [I,C]; C12N0015-82 [I,A]
	IPCR	C12N0015-82 [I,C]; C12N0015-82 [I,A]
	ECLA	C12N015/82A4B
TR 200103311	IPCI	C12N0015-82 [ICM,7]
	IPCR	C12N0015-82 [I,C*]; C12N0015-82 [I,A]
	ECLA	C12N015/82A4B
AU 772686	IPCI	C12N0015-82 [ICM,7]
	IPCR	C12N0015-82 [I,C*]; C12N0015-82 [I,A]
	ECLA	C12N015/82A4B
CN 1234869	IPCI	C12N0015-82 [I,A]; C12N0015-82 [I,C]
	IPCR	C12N0015-82 [I,C]; C12N0015-82 [I,A]
	ECLA	C12N015/82A4B
AT 365218	IPCI	C12N0015-82 [I,C]; C12N0015-82 [I,A]
	IPCR	C12N0015-82 [I,C]; C12N0015-82 [I,A]
	ECLA	C12N015/82A4B
ES 2288478	IPCI	C12N0015-82 [I,C]; C12N0015-82 [I,A]
	IPCR	C12N0015-82 [I,C]; C12N0015-82 [I,A]
	ECLA	C12N015/82A4B
US 6483013	IPCI	C12N0015-84 [ICM,7]; C12N0005-04 [ICS,7]; A01H0001-00 [ICS,7]; A01H0005-00 [ICS,7]; A01H0005-10 [ICS,7]
	IPCR	C12N0015-82 [I,C*]; C12N0015-82 [I,A]; C12N0015-84 [I,C*]; C12N0015-84 [I,A]
	NCL	800/294.000; 435/419.000; 435/427.000; 435/430.000; 435/430.100; 435/469.000; 800/260.000; 800/278.000; 800/314.000
	ECLA	C12N015/82A4B
MX 2001011871	IPCI	C12N0015-82 [ICM,6]

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ECLA C12N015/82A4B
ZA 2001009521 IPCI C12N [ICM,7]
ECLA C12N015/82A4B
IN 2001CN01741 IPCI C12N0015-82 [ICM,7]

ABSTRACT:

This invention relates to improved methods for the production of transgenic cotton plants, comprising cocultivating *Agrobacterium* cells comprising a DNA fragment of interest operably linked to at least one T-DNA border with cotton embryogenic callus in the presence of a plant phenolic compound

SUPPL. TERM: *agrobacterium* mediated transformation transgenic cotton
prepn

INDEX TERM: DNA
ROLE: AGR (Agricultural use); BUU (Biological use,
unclassified); BIOL (Biological study); USES (Uses)
(T, linked to DNA fragments for transformation; improved
method for *agrobacterium* mediated
transformation of cotton)

INDEX TERM: Embryo, plant
(callus of; improved method for *agrobacterium*
mediated transformation of cotton)

INDEX TERM: Plant tissue
(callus, embryogenic, of cotton; improved
method for *agrobacterium* mediated
transformation of cotton)

INDEX TERM: Phenols, biological studies
ROLE: AGR (Agricultural use); BUU (Biological use,
unclassified); BIOL (Biological study); USES (Uses)
(compound, for DNA transformation in plants;
improved method for *agrobacterium* mediated
transformation of cotton)

INDEX TERM: Organ, plant
(hypocotyl, of a cotton seedling,
embryogenic callus from; improved method for
agrobacterium mediated transformation of
cotton)

INDEX TERM: DNA
ROLE: AGR (Agricultural use); BUU (Biological use,
unclassified); BIOL (Biological study); USES (Uses)
(linked to T-DNA for transformation; improved method for
agrobacterium mediated transformation of
cotton)

INDEX TERM: *Agrobacterium*
Agrobacterium tumefaciens
(mediated DNA transformation in plants;
improved method for *agrobacterium* mediated
transformation of cotton)

INDEX TERM: Transformation, genetic
(mediated by *agrobacterium*; improved method for
agrobacterium mediated transformation of
cotton)

INDEX TERM: Cotton (*Gossypium barbadense*)
Plant (Embryophyta)
(transgenic; improved method for *agrobacterium*
mediated transformation of cotton)

INDEX TERM: 87-66-1, Pyrogalllic acid 89-86-1, β -Resorcylic acid
99-50-3, Protocatechuic acid 99-96-7, p-Hydroxybenzoic
acid, biological studies 120-80-9, Catechol, biological
studies 121-33-5, Vanillin 149-91-7, Gallic
acid, biological studies 530-57-4, Syringic acid

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530-59-6, Sinapinic acid 1135-24-6, Ferulic acid
2478-38-8, Acetosyringone 90426-22-5,
 α -Hydroxy-acetosyringone
ROLE: AGR (Agricultural use); BUU (Biological use,
unclassified); BIOL (Biological study); USES (Uses)
(phenolic compound, for DNA transformation in
plants; improved method for agrobacterium
mediated transformation of cotton)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1
CITINGS)

DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009

OS.CITING.REFS: CAPLUS 2003:396514

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS
RECORD.

REFERENCE(S): (1) Calgene Inc; WO 9712512 A 1997
(2) Chair, H; Kasetsart Journal Natural Sciences 1997, V31,
P149
(3) Firoozabady; Plant Molecular Biology 1987, V10, P105
ZCAPLUS
(4) Gelvin, S; US 4954442 A 1990 ZCAPLUS
(5) Halluin, K; WO 9837212 A 1998 ZCAPLUS
(6) Hoshino, Y; Plant Biotechnol (Tokyo) 1998, V15(1), P29
ZCAPLUS
(7) Maier, C; WO 9743430 A 1997 ZCAPLUS
(8) Phytogen; WO 8905344 A 1989 ZCAPLUS
(9) Veluthambi, K; Journal of Bacteriology 1989, V171(7),
P3696 ZCAPLUS

IT 149-91-7, Gallic acid, biological studies 530-57-4,
Syringic acid

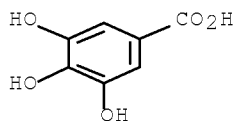
RL: AGR (Agricultural use); BUU (Biological use, unclassified);

BIOL (Biological study); USES (Uses)

(phenolic compound, for DNA transformation in plants; improved
method for agrobacterium mediated transformation of
cotton)

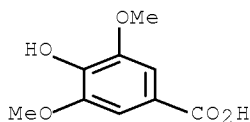
RN 149-91-7 ZCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy- (CA INDEX NAME)



RN 530-57-4 ZCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



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L92 ANSWER 18 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:688013 ZCAPLUS Full-text

DOCUMENT NUMBER: 133:248394

ENTRY DATE: Entered STN: 29 Sep 2000

TITLE: Preparation of benzoate and benzyl derivatives insect repellents for conifer sapling protection

INVENTOR(S): Nordlander, Goran; Nordenhem, Henrik; Borg-Karlson, Anna-karin; Unelius, Rikard

PATENT ASSIGNEE(S): Swed.

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

INT. PATENT CLASSIF.:

MAIN: A01N037-10

SECONDARY: A01N031-06; A01N043-30; A01N037-18

CLASSIFICATION: ~~S~~-4 (Agrochemical Bioregulators)

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000056152	A1	20000928	WO 2000-SE580	20000323 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
SE 9901062	A	20000924	SE 1999-1062	19990323 <--
SE 515989	C2	20011105		
CA 2365998	A1	20000928	CA 2000-2365998	20000323 <--
EP 1162885	A1	20011219	EP 2000-921251	20000323 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
NO 2001004590	A	20011024	NO 2001-4590	20010921 <--
PRIORITY APPLN. INFO.:			SE 1999-1062	A 19990323 <--
			WO 2000-SE580	W 20000323 <--

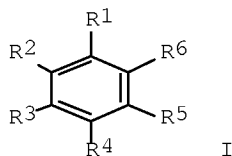
PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000056152	ICM	A01N037-10
	ICS	A01N031-06; A01N043-30; A01N037-18
	IPCI	A01N0037-10 [ICM,7]; A01N0031-06 [ICS,7]; A01N0031-00 [ICS,7,C*]; A01N0043-30 [ICS,7]; A01N0043-02 [ICS,7,C*]; A01N0037-18 [ICS,7]
	IPCR	A01N0031-00 [I,C*]; A01N0031-16 [I,A]; A01N0037-36 [I,C*]; A01N0037-38 [I,A]; A01N0037-40 [I,A]; A01N0037-44 [I,C*]; A01N0037-48 [I,A]; A01N0043-02 [I,C*]; A01N0043-28 [I,A]
	ECLA	A01N031/16; A01N037/38; A01N037/40; A01N037/48; A01N043/28
SE 9901062	IPCI	A01N0037-10 [ICM,7]; A01N0031-06 [ICS,7]; A01N0031-00 [ICS,7,C*]; A01N0043-30 [ICS,7]; A01N0043-02 [ICS,7,C*]
	IPCR	A01N0031-00 [I,C*]; A01N0031-16 [I,A]; A01N0037-36 [I,C*]; A01N0037-38 [I,A]; A01N0037-40 [I,A]; A01N0037-44 [I,C*]; A01N0037-48 [I,A]; A01N0043-02 [I,C*]; A01N0043-28 [I,A]

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	ECLA	A01N031/16; A01N037/38; A01N037/40; A01N037/48; A01N043/28
CA 2365998	IPCI	A01N0037-10 [ICM,7]; A01N0031-06 [ICS,7]; A01N0031-00 [ICS,7,C*]; A01N0037-18 [ICS,7]; A01N0043-30 [ICS,7]; A01N0043-02 [ICS,7,C*]
	IPCR	A01N0031-00 [I,C*]; A01N0031-16 [I,A]; A01N0037-36 [I,C*]; A01N0037-38 [I,A]; A01N0037-40 [I,A]; A01N0037-44 [I,C*]; A01N0037-48 [I,A]; A01N0043-02 [I,C*]; A01N0043-28 [I,A]
	ECLA	A01N031/16; A01N037/38; A01N037/40; A01N037/48; A01N043/28
EP 1162885	IPCI	A01N0037-10 [ICM,6]; A01N0031-06 [ICS,6]; A01N0031-00 [ICS,6,C*]; A01N0043-30 [ICS,6]; A01N0043-02 [ICS,6,C*]; A01N0037-18 [ICS,6]
	IPCR	A01N0031-00 [I,C*]; A01N0031-16 [I,A]; A01N0037-36 [I,C*]; A01N0037-38 [I,A]; A01N0037-40 [I,A]; A01N0037-44 [I,C*]; A01N0037-48 [I,A]; A01N0043-02 [I,C*]; A01N0043-28 [I,A]
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NO 2001004590	IPCI	A01N0037-110 [ICM,7]
	IPCR	A01N0031-00 [I,C*]; A01N0031-16 [I,A]; A01N0037-36 [I,C*]; A01N0037-38 [I,A]; A01N0037-40 [I,A]; A01N0037-44 [I,C*]; A01N0037-48 [I,A]; A01N0043-02 [I,C*]; A01N0043-28 [I,A]
	ECLA	A01N031/16; A01N037/38; A01N037/40; A01N037/48; A01N043/28

OTHER SOURCE(S): MARPAT 133:248394
GRAPHIC IMAGE:



ABSTRACT:

The benzoate and benzyl derivs. I (R1, R2, R3, R4, R5 = H, OH, (un)substituted alkyl, alkoxy, etc.; R6 = (un)substituted alkyl, alkoxy, etc.) are prepared as insect repellents for protection of conifer sapling against pine weevils.

SUPPL. TERM: insect repellent prepn conifer sapling pine weevil
INDEX TERM: Insect repellents
 (for conifer sapling protection)
INDEX TERM: Hylastes brunneus
 Hylastes cunicularius
 Hylobius abietis
 Hylobius congener
 Hylobius pales
 Hylobius pinastri
 Pachylobius picivorus
 (insect repellents for conifer sapling protection
 against)
INDEX TERM: Conifer
 (sapling; insect repellents for protection of)

INDEX TERM: 93-07-2, 3,4-Dimethoxybenzoic acid 93-15-2, Methyleugenol
 93-16-3, Methylisoeugenol 97-54-1, Isoeugenol
~~99-24-1~~, Methyl 3,4,5-trihydroxybenzoate 99-76-3,
 Methyl 4-hydroxybenzoate 119-36-8, Methyl
 2-hydroxybenzoate 306-08-1, Homovanillic acid 645-08-9,
 3-Hydroxy-4-methoxybenzoic acid 705-76-0,
 3,5-Dimethoxybenzyl alcohol 877-22-5,
 2-Hydroxy-3-methoxybenzoic acid 1916-07-0, Methyl
 3,4,5-trimethoxybenzoate 2150-37-0, Methyl
 3,5-dimethoxybenzoate 2150-38-1, Methyl
 3,4-dimethoxybenzoate 2150-42-7, Methyl
 2,3-dimethoxybenzoate 2150-43-8, Methyl
 3,4-dihydroxybenzoate 2150-44-9, Methyl
 3,5-dihydroxybenzoate 2150-47-2, Methyl
 2,4-dihydroxybenzoate 2612-02-4,
 2-Hydroxy-5-methoxybenzoic acid 2702-58-1, Methyl
 3,5-dinitrobenzoate 2905-82-0, Methyl
 2-hydroxy-5-methoxybenzoate 3943-74-6, Methyl
 4-hydroxy-3-methoxybenzoate 4191-73-5, Isopropyl
 4-hydroxybenzoate 4670-10-4, 3,5-Dimethoxyphenylacetic
 acid 4707-47-5, Methyl 2,4-dihydroxy-3,6-dimethylbenzoate
 5446-02-6, Methyl 2-hydroxy-4-methoxybenzoate 6342-70-7,
 Methyl 2-hydroxy-3-methoxybenzoate 6702-50-7, Methyl
 3-hydroxy-4-methoxybenzoate 37908-98-8, Methyl
 3-chloro-4-methoxybenzoate 51329-15-8, Methyl
 3,5-dibromobenzoate 62435-37-4
 ROLE: AGR (Agricultural use); BIOL (Biological
 study); USES (Uses)
 (insect repellent for conifer sapling protection)
 INDEX TERM: 94-53-1, Piperonylic acid 97-53-0, Eugenol
~~530-57-4~~, 3,5-Dimethoxy-4-hydroxybenzoic acid
 1132-21-4, 3,5-Dimethoxybenzoic acid
 ROLE: AGR (Agricultural use); RCT (Reactant); BIOL
 (Biological study); RACT (Reactant or reagent); USES (Uses)
 (insect repellent for conifer sapling protection)
 INDEX TERM: ~~884-35-5P~~, Methyl 4-hydroxy-3,5-dimethoxybenzoate
 72782-63-9P 120301-09-9P, N-Ethyl 3,5-dimethoxybenzamide
 295784-21-3P 295784-23-5P 295784-24-6P 295784-25-7P
 295784-26-8P 295784-27-9P
 ROLE: AGR (Agricultural use); SPN (Synthetic
 preparation); BIOL (Biological study); PREP (Preparation);
 USES (Uses)
 (insect repellent for conifer sapling protection)
 INDEX TERM: 1135-23-5
 ROLE: RCT (Reactant); RACT (Reactant or reagent)
 (insect repellent for conifer sapling protection)
 INDEX TERM: 3929-47-3, 3-(3,4-Dimethoxyphenyl)-1-propanol
 ROLE: AGR (Agricultural use); BIOL (Biological study); USES
 (Uses)
 (insect repellents for conifer sapling protection)
 INDEX TERM: 326-56-7P, Methyl 3,4-methylenedioxybenzoate 2305-13-7P
 ROLE: AGR (Agricultural use); SPN (Synthetic preparation);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation as insect repellent for conifer sapling
 protection)
 INDEX TERM: 67-56-1, Methanol, reactions 75-04-7, Ethylamine,
 reactions 75-08-1, Ethanethiol 75-89-8,
 2,2,2-Trifluoroethanol 112-53-8, 1-Dodecanol 928-97-2
 1849-29-2, Trideuteriomethanol 17213-57-9,
 3,5-Dimethoxybenzoyl chloride

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ROLE: RCT (Reactant); RACT (Reactant or reagent)
(reactant in preparation of insect repellents for conifer
sapling protection)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4
CITINGS)

DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009

OS.CITING.REFS: CAPLUS 2007:1138534; 2002:157486; 2002:10202; 2001:849597

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS
RECORD.

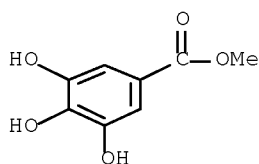
REFERENCE(S): (1) Anon; JP A56115206 1981
(2) Borden; US 6051612 A 2000 ZCAPLUS
(3) Hayes; US 5518757 A 1996 ZCAPLUS
(4) Hayes; US 5695807 A 1997 ZCAPLUS
(5) Hayes, J; US 5403863 A 1995 ZCAPLUS
(6) Inazuka; US 4219570 A 1980 ZCAPLUS
(7) Maier-Bode, H; DE 696347 C 1940 ZCAPLUS
(8) Mattsson; SE 7709013 A 1979
(9) Octrooibureau Kisch N V; WO 9853678 A2 1998 ZCAPLUS

IT 99-24-1, Methyl 3,4,5-trihydroxybenzoate

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(insect repellent for conifer sapling protection)

RN 99-24-1 ZCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, methyl ester (CA INDEX NAME)

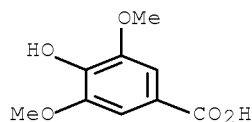


IT 530-57-4, 3,5-Dimethoxy-4-hydroxybenzoic acid

RL: AGR (Agricultural use); RCT (Reactant); BIOL (Biological
study); RACT (Reactant or reagent); USES (Uses)
(insect repellent for conifer sapling protection)

RN 530-57-4 ZCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)

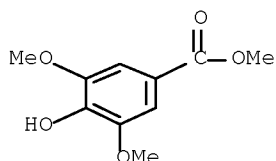


IT 884-35-5F, Methyl 4-hydroxy-3,5-dimethoxybenzoate

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(insect repellent for conifer sapling protection)

RN 884-35-5 ZCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy-, methyl ester (CA INDEX NAME)



L92 ANSWER 19 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2000:300759 ZCAPLUS Full-text
 DOCUMENT NUMBER: 132:289952
 ENTRY DATE: Entered STN: 09 May 2000
 TITLE: Germination stimulants for Plasmodiophora brassicae and prevention of cruciferous vegetables from the fungal infection
 INVENTOR(S): Ohi, Michio; Hatake, Shuichi
 PATENT ASSIGNEE(S): Tama Biochemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 INT. PATENT CLASSIF.:
 MAIN: A01N031-16
 SECONDARY: A01N025-00; A01N037-38; A01N037-40; A01N043-08; A01N043-16; A01N065-00
 CLASSIFICATION: ~~5-2~~ (Agrochemical Bioregulators)
 Section cross-reference(s): 10
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000128708	A	20000509	JP 1998-298322	19981020 <--
PRIORITY APPLN. INFO.:			JP 1998-298322	19981020 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2000128708	ICM	A01N031-16
	ICS	A01N025-00; A01N037-38; A01N037-40; A01N043-08; A01N043-16; A01N065-00
	IPCI	A01N0031-16 [ICM,7]; A01N0025-00 [ICS,7]; A01N0037-38 [ICS,7]; A01N0037-40 [ICS,7]; A01N0043-08 [ICS,7]; A01N0043-16 [ICS,7]; A01N0065-00 [ICS,7]
	IPCR	A01N0025-00 [I,C*]; A01N0025-00 [I,A]; A01N0031-00 [I,C*]; A01N0031-16 [I,A]; A01N0037-36 [I,C*]; A01N0037-38 [I,A]; A01N0037-40 [I,A]; A01N0043-02 [I,C*]; A01N0043-08 [I,A]; A01N0043-16 [I,A]; A01N0065-00 [I,C]; A01N0065-00 [I,A]; A01N0065-30 [I,C]; A01N0065-30 [I,A]

ABSTRACT:

The germination stimulators contain compds. having phenol or pyrone structure, e.g.caffeic acid, tannic acid, corilagin, flavone, coumalic acid, etc., or materials containing the compds. Cruciferous vegetables are prevented from infection with the fungi by previously treating P. brassicae spores with the above compds. or materials in the absence of the plants. Germinated fungi can not grow because there is no Cruciferae root as hosts. A spore suspension

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of *P. brassicae* was incubated with caffeic acid at 25° for 7 days. The culture was added to soil and Chinese cabbage was cultivated on the soil for 35 days. No root knots were observed

SUPPL. TERM: Plasmodiophora germination stimulant phenol compd Cruciferae
root knot prevention; Brassicaceae prevention root knot
Plasmodiophora germination stimulation caffeic acid

INDEX TERM: Buckwheat (*Fagopyrum esculentum*)
(husk; prevention of cruciferous vegetables from root
knot by previously treating Plasmodiophora brassicae
spores with phenol or pyrone compds. in plant
-free condition)

INDEX TERM: Phenols, biological studies
ROLE: AGR (Agricultural use); BAC (Biological activity or
effector, except adverse); BSU (Biological study,
unclassified); BIOL (Biological study); USES (Uses)
(polyphenols, nonpolymeric; prevention of cruciferous
vegetables from root knot by previously treating
Plasmodiophora brassicae spores with phenol or pyrone
compds. in plant-free condition)

INDEX TERM: Chinese cabbage
Cruciferae (Brassicaceae)
Plasmodiophora brassicae
Spore germination
(prevention of cruciferous vegetables from root knot by
previously treating Plasmodiophora brassicae spores with
phenol or pyrone compds. in plant-free
condition)

INDEX TERM: Phenols, biological studies
Tannins
ROLE: AGR (Agricultural use); BAC (Biological activity or
effector, except adverse); BSU (Biological study,
unclassified); BIOL (Biological study); USES (Uses)
(prevention of cruciferous vegetables from root knot by
previously treating Plasmodiophora brassicae spores with
phenol or pyrone compds. in plant-free
condition)

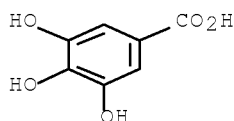
INDEX TERM: 117-39-5, Quercetin 149-91-7, Gallic acid,
biological studies 154-23-4, Catechol 331-39-5, Caffeic
acid 500-05-0, Coumalic acid 525-82-6, Flavone
23094-69-1, Corilagin
ROLE: AGR (Agricultural use); BAC (Biological
activity or effector, except adverse); BSU (Biological
study, unclassified); BIOL (Biological study); USES
(Uses)
(prevention of cruciferous vegetables from root knot by
previously treating Plasmodiophora brassicae spores with
phenol or pyrone compds. in plant-free
condition)

IT 149-91-7, Gallic acid, biological studies 23094-69-1
, Corilagin
RL: AGR (Agricultural use); BAC (Biological activity or
effector, except adverse); BSU (Biological study, unclassified); BIOL
(Biological study); USES (Uses)
(prevention of cruciferous vegetables from root knot by previously
treating Plasmodiophora brassicae spores with phenol or pyrone compds.
in plant-free condition)

RN 149-91-7 ZCAPLUS

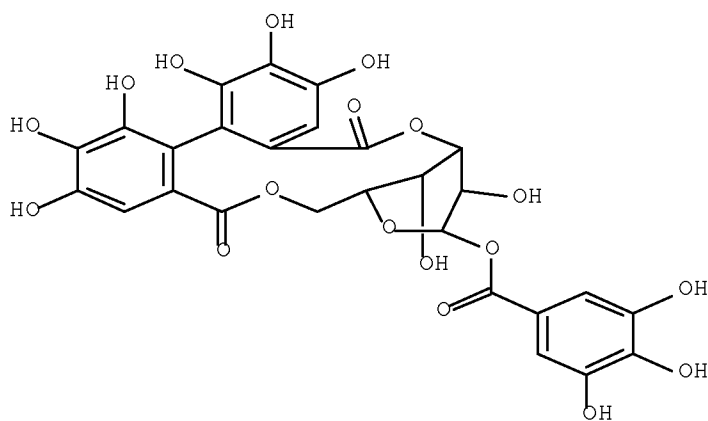
CN Benzoic acid, 3,4,5-trihydroxy- (CA INDEX NAME)

10/810211



RN 23094-69-1 ZCAPLUS

CN β -D-Glucopyranose, cyclic 3,6-[(1R)-4,4',5,5',6,6'-hexahydroxy[1,1'-biphenyl]-2,2'-dicarboxylate] 1-(3,4,5-trihydroxybenzoate) (CA INDEX NAME)



L92 ANSWER 20 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:331243 ZCAPLUS [Full-text](#)

DOCUMENT NUMBER: 130:348547

ENTRY DATE: Entered STN: 28 May 1999

TITLE: Biocidal compositions containing metal compounds, alkanolamines, and phenols or aromatic amines, and their use

INVENTOR(S): Aoki, Hiroshi; Tanaka, Kazumi; Echigo, Takashi

PATENT ASSIGNEE(S): Showa Denko K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

INT. PATENT CLASSIF.:

MAIN: A01N033-08
SECONDARY: A01N031-16; A01N037-10; A01N037-12; A01N033-08;
A01N059-16; A01N059-20; A01N059-06; A01N031-08;
A01N033-06

CLASSIFICATION: 5-2 (Agrochemical Bioregulators)
Section cross-reference(s): 43, 57

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 11139905      A      19990525      JP 1997-308462      19971111 <--
PRIORITY APPLN. INFO.:      JP 1997-308462      19971111 <--
PATENT CLASSIFICATION CODES:

```

INDEX TERM: Bricks
Ceramics
Concrete
Porous materials
Rush

Straw
Wood
 (biocidal compns. containing metal compds.,
 alkanolamines, and phenols or aromatic amines for)

INDEX TERM: Alloys, miscellaneous
Charcoal
Fibers
Plastic foams
ROLE: MSC (Miscellaneous)
 (biocidal compns. containing metal compds.,
 alkanolamines, and phenols or aromatic amines for)

INDEX TERM: Wood
 (flour; biocidal compns. containing metal compds.,
 alkanolamines, and phenols or aromatic amines for)

INDEX TERM: Oxidation catalysts
 (for polyphenols; biocidal compns. containing metal
 compds., alkanolamines, and phenols or aromatic amines)

INDEX TERM: Rice (*Oryza sativa*)
 (hulls; biocidal compns. containing metal compds.,
 alkanolamines, and phenols or aromatic amines for)

INDEX TERM: 7439-92-1D, Lead, compds., biological studies 7439-95-4D,
Magnesium, compds., biological studies 7439-96-5D,
Manganese, compds., biological studies 7439-98-7D,
Molybdenum, compds., biological studies 7440-02-0D,
Nickel, compds., biological studies 7440-05-3D, Palladium,
compds., biological studies 7440-22-4D, Silver, compds.,
biological studies 7440-24-6D, Strontium, compds.,
biological studies 7440-31-5D, Tin, compds., biological
studies 7440-32-6D, Titanium, compds., biological studies
7440-36-0D, Antimony, compds., biological studies
7440-39-3D, Barium, compds., biological studies
7440-43-9D, Cadmium, compds., biological studies
7440-47-3D, Chromium, compds., biological studies
7440-48-4D, Cobalt, compds., biological studies
7440-62-2D, Vanadium, compds., biological studies
7440-67-7D, Zirconium, compds., biological studies
7440-70-2D, Calcium, compds., biological studies
7446-70-0, Aluminum chloride, biological studies
7646-85-7, Zinc chloride, biological studies 7720-78-7,
Iron(II) sulfate 7758-98-7, Copper(II) sulfate, biological
studies 20427-59-2, Copper(II) hydroxide 36386-77-3,
Copper(II) carbonate
ROLE: BAC (Biological activity or effector, except adverse);
BSU (Biological study, unclassified); BUU (Biological use,
unclassified); BIOL (Biological study); USES (Uses)
 (biocidal compns. containing metal compds.,
 alkanolamines, and phenols or aromatic amines)

INDEX TERM: 87-66-1, Pyrogallol 102-71-6, Triethanolamine, biological
studies 111-42-2, biological studies 120-80-9,
1,2-Benzenediol, biological studies 123-31-9,
1,4-Benzenediol, biological studies 141-43-5, biological
studies 149-91-7, Gallic acid, biological
studies 8062-15-5, Ligninsulfonic acid 9005-53-2,
Lignin, biological studies
ROLE: BUU (Biological use, unclassified); BIOL (Biological
study); USES (Uses)
 (biocidal compns. containing metal compds.,
 alkanolamines, and phenols or aromatic amines)

INDEX TERM: 9002-10-2, Catechol oxidase 9003-99-0, Peroxidase
9029-44-1, Ascorbate oxidase 80498-15-3, Laccase

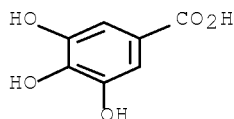
10/810211

80619-01-8, Bilirubin oxidase
ROLE: CAT (Catalyst use); USES (Uses)
(polyphenol oxidation catalyst; biocidal compns.
containing metal compds., alkanolamines, and phenols or

aromatic

amines)

IT 149-91-7, Gallic acid, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(biocidal compns. containing metal compds., alkanolamines, and
phenols or aromatic amines)
RN 149-91-7 ZCAPLUS
CN Benzoic acid, 3,4,5-trihydroxy- (CA INDEX NAME)



L92 ANSWER 21 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:605018 ZCAPLUS Full-text
DOCUMENT NUMBER: 129:198884
ORIGINAL REFERENCE NO.: 129:40295a,40298a
ENTRY DATE: Entered STN: 24 Sep 1998
TITLE: Increasing the efficiency of integrative
transformation of monocotyledonous plants by
stimulation of cell division
INVENTOR(S): D'Halluin, Kathleen
PATENT ASSIGNEE(S): Plant Genetic Systems, N.V., Belg.
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
INT. PATENT CLASSIF.:
MAIN: C12N015-82
SECONDARY: C12N005-04
CLASSIFICATION: 3-2 (Biochemical Genetics)
Section cross-reference(s): 11
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9837212	A1	19980827	WO 1998-IB220	19980220 <--
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
CA 2252612	A1	19980827	CA 1998-2252612	19980220 <--
AU 9860027	A	19980909	AU 1998-60027	19980220 <--
AU 727570	B2	20001214		

10/810211

EP 900279	A1	19990310	EP 1998-903214	19980220 <--
EP 900279	B1	20040929		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1222939	A	19990714	CN 1998-800476	19980220 <--
CN 1155715	C	20040630		
BR 9805900	A	19990824	BR 1998-5900	19980220 <--
JP 2000509612	T	20000802	JP 1998-536435	19980220 <--
JP 4199312	B2	20081217		
US 6140553	A	20001031	US 1998-26673	19980220 <--
AT 278026	T	20041015	AT 1998-903214	19980220 <--
ES 2229472	T3	20050416	ES 1998-903214	19980220 <--
US 6372963	B1	20020416	US 2000-480142	20000110 <--
PRIORITY APPLN. INFO.:			US 1997-135507P	P 19970220 <--
			US 1997-808988	A 19970220 <--
			EP 1990-403332	A 19901123 <--
			US 1998-26673	A3 19980220 <--
			WO 1998-IB220	W 19980220 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9837212	ICM	C12N015-82
	ICS	C12N005-04
	IPCI	C12N0015-82 [ICM,6]; C12N0005-04 [ICS,6]
	IPCR	C12N0015-09 [I,C*]; C12N0015-09 [I,A]; A01H0001-00 [I,C*]; A01H0001-00 [I,A]; C12N0005-10 [I,C*]; C12N0005-10 [I,A]; C12N0015-29 [I,C*]; C12N0015-29 [I,A]; C12N0015-82 [I,C*]; C12N0015-82 [I,A]; C12N0015-84 [I,C*]; C12N0015-84 [I,A]
CA 2252612	ECLA	C12N015/82A; C12N015/82A4B
	IPCI	C12N0015-82 [ICM,6]; C12N0005-04 [ICS,6]
	IPCR	C12N0015-09 [I,C*]; C12N0015-09 [I,A]; A01H0001-00 [I,C*]; A01H0001-00 [I,A]; C12N0005-10 [I,C*]; C12N0005-10 [I,A]; C12N0015-29 [I,C*]; C12N0015-29 [I,A]; C12N0015-82 [I,C*]; C12N0015-82 [I,A]; C12N0015-84 [I,C*]; C12N0015-84 [I,A]
AU 9860027	ECLA	C12N015/82A; C12N015/82A4B
	IPCI	C12N0015-82 [ICM,6]; C12N0005-04 [ICS,6]
	IPCR	C12N0015-09 [I,C*]; C12N0015-09 [I,A]; A01H0001-00 [I,C*]; A01H0001-00 [I,A]; C12N0005-10 [I,C*]; C12N0005-10 [I,A]; C12N0015-29 [I,C*]; C12N0015-29 [I,A]; C12N0015-82 [I,C*]; C12N0015-82 [I,A]; C12N0015-84 [I,C*]; C12N0015-84 [I,A]
EP 900279	ECLA	C12N015/82A; C12N015/82A4B
	IPCI	C12N0015-82 [ICM,6]; C12N0005-04 [ICS,6]
	IPCR	C12N0015-09 [I,C*]; C12N0015-09 [I,A]; A01H0001-00 [I,C*]; A01H0001-00 [I,A]; C12N0005-10 [I,C*]; C12N0005-10 [I,A]; C12N0015-29 [I,C*]; C12N0015-29 [I,A]; C12N0015-82 [I,C*]; C12N0015-82 [I,A]; C12N0015-84 [I,C*]; C12N0015-84 [I,A]
CN 1222939	ECLA	C12N015/82A; C12N015/82A4B
	IPCI	C12N0015-82 [ICM,6]; C12N0005-04 [ICS,7]; C12N0015-82 [ICS,7]
	IPCR	C12N0015-09 [I,C*]; C12N0015-09 [I,A]; A01H0001-00 [I,C*]; A01H0001-00 [I,A]; C12N0005-10 [I,C*]; C12N0005-10 [I,A]; C12N0015-29 [I,C*]; C12N0015-29 [I,A]; C12N0015-82 [I,C*]; C12N0015-82 [I,A]; C12N0015-84 [I,C*]; C12N0015-84 [I,A]
BR 9805900	ECLA	C12N015/82A; C12N015/82A4B
	IPCI	C12N0015-82 [ICM,6]; C12N0005-04 [ICS,6]

	IPCR	C12N0015-09 [I,C*]; C12N0015-09 [I,A]; A01H0001-00 [I,C*]; A01H0001-00 [I,A]; C12N0005-10 [I,C*]; C12N0005-10 [I,A]; C12N0015-29 [I,C*]; C12N0015-29 [I,A]; C12N0015-82 [I,C*]; C12N0015-82 [I,A]; C12N0015-84 [I,C*]; C12N0015-84 [I,A]
	ECLA	C12N015/82A; C12N015/82A4B
JP 2000509612	IPCI	A01H0005-00 [I,A]; C12N0015-09 [N,A]; C12N0005-10 [N,A]; C12N0001-21 [N,A]
	IPCR	C12N0015-09 [I,C*]; C12N0015-09 [I,A]; A01H0001-00 [I,C*]; A01H0001-00 [I,A]; C12N0005-10 [I,C*]; C12N0005-10 [I,A]; C12N0015-29 [I,C*]; C12N0015-29 [I,A]; C12N0015-82 [I,C*]; C12N0015-82 [I,A]; C12N0015-84 [I,C*]; C12N0015-84 [I,A]; A01H0005-00 [I,C]; A01H0005-00 [I,A]; C12N0001-21 [N,C]; C12N0001-21 [N,A]
	ECLA	C12N015/82A; C12N015/82A4B
US 6140553	IPCI	C12N0015-00 [ICM]; C12N0015-29 [ICS]; C12N0015-82 [ICS]; A01H0004-00 [ICS]
	IPCR	C12N0015-09 [I,C*]; C12N0015-09 [I,A]; A01H0001-00 [I,C*]; A01H0001-00 [I,A]; C12N0005-10 [I,C*]; C12N0005-10 [I,A]; C12N0015-29 [I,C*]; C12N0015-29 [I,A]; C12N0015-82 [I,C*]; C12N0015-82 [I,A]; C12N0015-84 [I,C*]; C12N0015-84 [I,A]
	NCL	800/278.000; 435/320.100; 435/419.000; 435/468.000; 536/023.600; 536/023.700; 536/024.100; 800/295.000; 800/298.000
	ECLA	C12N015/82A; C12N015/82A4B
AT 278026	IPCI	C12N0015-82 [ICM,7]; C12N0005-04 [ICS,7]
	ECLA	C12N015/82A; C12N015/82A4B
ES 2229472	IPCI	C12N0015-82 [ICM,7]; C12N0005-04 [ICS,7]
	IPCR	C12N0015-09 [I,C*]; C12N0015-09 [I,A]; A01H0001-00 [I,C*]; A01H0001-00 [I,A]; C12N0005-10 [I,C*]; C12N0005-10 [I,A]; C12N0015-29 [I,C*]; C12N0015-29 [I,A]; C12N0015-82 [I,C*]; C12N0015-82 [I,A]; C12N0015-84 [I,C*]; C12N0015-84 [I,A]
	ECLA	C12N015/82A; C12N015/82A4B
US 6372963	IPCI	C12N0005-04 [ICM]; C12N0005-10 [ICS]; C12N0015-84 [ICS]; A01H0001-00 [ICS]
	IPCR	C12N0015-09 [I,C*]; C12N0015-09 [I,A]; A01H0001-00 [I,C*]; A01H0001-00 [I,A]; C12N0005-10 [I,C*]; C12N0005-10 [I,A]; C12N0015-29 [I,C*]; C12N0015-29 [I,A]; C12N0015-82 [I,C*]; C12N0015-82 [I,A]; C12N0015-84 [I,C*]; C12N0015-84 [I,A]
	NCL	800/294.000; 435/419.000; 435/420.000; 435/469.000; 800/298.000
	ECLA	C12N015/82A; C12N015/82A4B

ABSTRACT:

A method for increasing the efficiency of integrative transformation of monocotyledonous plants, especially cereals, by stimulation of cell division with plant phenolic compds. immediately prior to transformation is described. After stimulation of cell division, transformation can be by standard phys. or biol. methods. Preferred phenolic compds. include α -hydroxy-acetosyringone, syringic acid, ferulic acid, vanillin and related compds. Type I corn callus was transformed using *Agrobacterium*. Pretreatment of callus with 100-200 μ M acetosyringone for 5 days followed by transformation in the presence of 100-200 μ M acetosyringone led to transformation rates of 0.3-0.9% vs. <0.1% for control cells. Presence of a functional virB11 gene on the transforming plasmid increased the efficiency of transformation.

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SUPPL. TERM: monocot transformation cell division phenols; catechol
monocot transformation cell division

INDEX TERM: DNA
ROLE: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(T; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

INDEX TERM: Plant tissue
(callus, transformation of; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

INDEX TERM: Cell division
Monocotyledon (Liliopsida)
Transformation, genetic
(increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

INDEX TERM: DNA sequences
(of T-DNAs; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

INDEX TERM: Plasmid vectors
(pGSV71, for transformation of monocots; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

INDEX TERM: Plasmid vectors
(pTC0114, for transformation of monocots; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

INDEX TERM: Plasmid vectors
(pTC0121, for transformation of monocots; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

INDEX TERM: Plasmid vectors
(pVE200, for transformation of monocots; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

INDEX TERM: Plant tissue culture
(stimulation of cell division in; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

INDEX TERM: Flavanols
Phenols, biological studies
ROLE: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(stimulation of plant cell division by; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

INDEX TERM: Agrobacterium tumefaciens
(transformation of monocots using; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

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INDEX TERM: Barley
Corn
Rice (*Oryza sativa*)
Wheat
(transformation of; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

INDEX TERM: Gene, microbial
ROLE: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(virB11, in T-DNA-mediated transformation; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

INDEX TERM: 212194-19-9, DNA (plasmid pGVS71 T-DNA plus flanks)
212194-20-2 212194-21-3, DNA (plasmid pGVS8 T-DNA plus flanks)
ROLE: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(nucleotide sequence; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

INDEX TERM: 87-66-1D, Pyrogalllic acid, mixts. containing 89-86-1D,
 β -Resorcylic acid, mixts. containing 99-50-3D,
Protocatechuic acid, mixts. containing 99-96-7D, mixts.
containing
120-80-9D, Catechol, mixts. containing 121-33-5D, Vanillin, mixts. containing 149-91-7D, Gallic acid, mixts. containing 530-57-4D, Syringic acid, mixts. containing 530-59-6D, Sinapinic acid, mixts. containing 1135-24-6D, Ferulic acid, mixts. containing 2478-38-8D, Acetosyringone, mixts. containing 90426-22-5D, α -Hydroxy-acetosyringone, mixts. containing
ROLE: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(stimulation of plant cell division with; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009

OS.CITING.REFS: CAPLUS 2002:793742; 2002:390488; 2000:842294; 2000:260560

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD.

REFERENCE(S): (1) Biocem Knittel Nathalie; WO 9506741 A 1995 ZCAPLUS
(2) Bolton, G; SCIENCE 1986, V232, P983 ZCAPLUS
(3) Cetus Corp; WO 8504899 A 1985 ZCAPLUS
(4) Chang, H; BOTANICAL BULLETIN OF THE ACADEMIA SINICA 1991, V32, P171 ZCAPLUS
(5) D'Halluin, K; THE PLANT CELL 1992, V4(12), P1495 ZCAPLUS
(6) Gelvin, S; US 4954442 A 1990 ZCAPLUS
(7) Goldman, S; US 5177010 A 1993 ZCAPLUS
(8) Guivarc'H, A; PROTOPLASMA 1993, V174, P10 ZCAPLUS
(9) Ishida, Y; BIO/TECHNOLOGY 1996, V14(6), P745 ZCAPLUS
(10) Ohio State Res Found; WO 9732016 A 1997 ZCAPLUS

IT 149-91-7D, Gallic acid, mixts. containing 530-57-4D, Syringic acid, mixts. containing
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

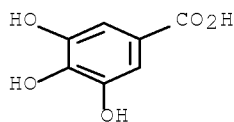
10/810211

study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(stimulation of plant cell division with; increasing efficiency of integrative transformation of monocotyledonous plants by stimulation of cell division)

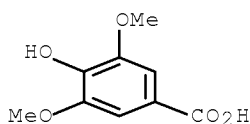
RN 149-91-7 ZCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy- (CA INDEX NAME)



RN 530-57-4 ZCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



L92 ANSWER 22 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:457015 ZCAPLUS [Full-text](#)

DOCUMENT NUMBER: 129:212936

ORIGINAL REFERENCE NO.: 129:43171a, 43174a

ENTRY DATE: Entered STN: 23 Jul 1998

TITLE: Field efficacy of *Verticillium lecanii*, sex pheromone, and pheromone analogs as potential management agents for soybean cyst nematode

AUTHOR(S): Meyer, S. L. F.; Johnson, G.; Dimock, M.; Fahey, J. W.; Huettel, R. N.

CORPORATE SOURCE: USDA ARS, Nematology Laboratory, Beltsville, MD, 20705-2350, USA

SOURCE: Journal of Nematology (1997), 29(3), 282-288

CODEN: JONEB5; ISSN: 0022-300X

PUBLISHER: Society of Nematologists

DOCUMENT TYPE: Journal

LANGUAGE: English

CLASSIFICATION: 5-4 (Agrochemical Bioregulators)

ABSTRACT:

A soybean cyst nematode sex pheromone (vanillic acid), chemical analogs of the pheromone, and the fungus *Verticillium lecanii* were applied in alginate prills (340 kg/ha) to microplots and small-scale field plots as potential management agents for *H. glycines* on soybean. In 1991 microplot tests, treatment with *V. lecanii*, vanillic acid, syringic acid plus *V. lecanii*, or vanillic acid plus *V. lecanii* lowered mid-season cyst nos., compared with the untreated susceptible cultivar control, autoclaved *V. lecanii* treatment, or aldicarb treatment. At-harvest cyst nos. were lowest with *V. lecanii* and with vanillic acid treatments. Aldicarb treatment reduced mid-season cyst nos. in 1992. There were no differences among seed yields either year. In the field

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trials, nos. of cysts were reduced one or both years with aldicarb, ferulic acid, syringic acid, vanillic acid, or 4-hydroxy-3-methoxybenzonitrile treatments, or with a resistant cultivar, compared to an untreated susceptible cultivar. Highest yields were recorded after treatment with 4-hydroxy-3-methoxybenzonitrile (1991), Me vanillate (1992), and aldicarb (1992). These studies indicate that some chemical analogs of vanillic acid have potential for use in soybean cyst nematode management schemes.

SUPPL. TERM: nematocide Verticillium intergrated pest control Heterodera
INDEX TERM: Nematocides
Verticillium lecanii
(control of soybean cyst nematode by)

INDEX TERM: Heterodera glycines
Integrated pest control
(efficacy of Verticillium lecanii, sex pheromone, and
pheromone analogs for soybean cyst nematode
control)

INDEX TERM: 116-06-3, Aldicarb 121-34-6, (Vanillic acid)
530-57-4, Syringic acid 1135-24-6, Ferulic acid
4421-08-3, 4-Hydroxy-3-methoxybenzonitrile
ROLE: AGR (Agricultural use); BIOL (Biological
study); USES (Uses)
(control of soybean cyst nematode by)

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7
CITINGS)

DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009

OS.CITING.REFS: CAPLUS 2008:788138; 2006:399634; 2005:977838; 2003:669097;
2001:376639; 2000:492865; 1998:785095

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS
RECORD.

REFERENCE(S): (1) Carris, L; Bulletin 786 1989
(2) Chen, S; Journal of Nematology 1994, V26, P296 MEDLINE
(3) Chen, S; Phytopathology 1996, V86, P319
(4) Gintis, B; Nematropica 1983, V13, P181
(5) Godoy, G; Nematropica 1982, V12, P111
(6) Huettel, R; Biological control of plant diseases,
progress and challenges for the future 1992, P273
(7) Huettel, R; Proceedings of the Helminthological Society
of Washington 1986, V53, P63
(8) Jaffe, H; Journal of Chemical Ecology 1989, V15, P2031
ZCAPLUS
(9) Kim, D; Journal of Nematology 1991, V23, P275 MEDLINE
(10) Kim, D; Phytopathology 1992, V82, P429
(11) Kim, D; Supplement to the Journal of Nematology 1994,
V26, P592 MEDLINE
(12) Kim, D; Supplement to the Journal of Nematology 1995,
V27, P602 MEDLINE
(13) Krusberg, L; Supplement to the Journal of Nematology
1994, V26, P599 MEDLINE
(14) Liu, W; Korean Journal of Applied Entomology 1995, V34,
P83
(15) Liu, X; Mycosystema 1992, V5, P117
(16) Meyer, S; Fundamental and Applied Nematology 1996, V19,
P305
(17) Meyer, S; Journal of Nematology 1990, V22, P532 MEDLINE
(18) Meyer, S; Journal of Nematology 1995, V27, P409 MEDLINE
(19) Meyer, S; Journal of Nematology 1996, V28, P36 ZCAPLUS
(20) Meyer, S; Journal of the Helminthological Society of
Washington 1992, V59, P237
(21) Meyer, S; Nematologica 1996, V42, P114

- (22) Meyer, S; Pest management:Biologically based technologies 1993, P214
- (23) Morgan-Jones, G; Nematropica 1981, V11, P155
- (24) Niblack, T; Plant Disease 1986, V70, P448
- (25) Rodriguez-Kabana, R; Journal of Nematology 1988, V29, P191
- (26) Stern, S; Journal of Nematology 1988, V20, P661
- (27) Stiles, C; Nematropica 1993, V23, P81
- (28) Wrather, J; Plant Disease 1997, V81, P107

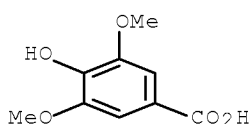
IT 530-57-4, Syringic acid

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)

(control of soybean cyst nematode by)

RN 530-57-4 ZCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



L92 ANSWER 23 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:347521 ZCAPLUS Full-text

DOCUMENT NUMBER: 129:105492

ORIGINAL REFERENCE NO.: 129:21589a,21592a

ENTRY DATE: Entered STN: 10 Jun 1998

TITLE: Application of a sex pheromone, pheromone analogs, and Verticillium lecanii for management of Heterodera glycines

AUTHOR(S): Meyer, S. L. F.; Huettel, R. N.

CORPORATE SOURCE: USDA ARS, Nematology Laboratory, Beltsville, MD, 20705-2350, USA

SOURCE: Journal of Nematology (1996), 28(1), 36-42

CODEN: JONEB5; ISSN: 0022-300X

PUBLISHER: Society of Nematologists

DOCUMENT TYPE: Journal

LANGUAGE: English

CLASSIFICATION: 5-4 (Agrochemical Bioregulators)

ABSTRACT:

A mutant strain of the fungus Verticillium lecanii and selected bioregulators of Heterodera glycines were evaluated for their potential to reduce population densities of the nematode on soybean under greenhouse conditions. The bioregulators tested were the H. glycines sex pheromone vanillic acid and the pheromone analogs syringic acid, isovanillic acid, ferulic acid, 4-hydroxy-3-methoxybenzonitrile, and Me vanillate. A V. lecanii-vanillic acid combination and a V. lecanii-syringic acid combination were also applied as treatments. Syringic acid, 4-hydroxy-3-methoxybenzonitrile, V. lecanii, V. lecanii-vanillic acid, and V. lecanii-syringic acid significantly reduced nematode population densities in the greenhouse tests. Results with vanillic acid, isovanillic acid, and ferulic acid treatments were variable. Me vanillate did not significantly reduce cyst nematode population densities.

SUPPL. TERM: sex pheromone Verticillium Heterodera nematocide soybean

INDEX TERM: Nematocides

(bio-; use of a sex pheromone, pheromone analogs, and

Verticillium lecanii for management of Heterodera
glycines on soybean)

INDEX TERM: Pheromones, animal
ROLE: AGR (Agricultural use); BIOL (Biological study); USES
(Uses)
(sex; use of a sex pheromone, pheromone analogs, and
Verticillium lecanii for management of Heterodera
glycines on soybean)

INDEX TERM: Heterodera glycines
Soybean (Glycine max)
Verticillium lecanii
(use of a sex pheromone, pheromone analogs, and
Verticillium lecanii for management of Heterodera
glycines on soybean)

INDEX TERM: 121-34-6, Vanillic acid 530-57-4, Syringic acid
645-08-9, Isovanillic acid 1135-24-6, Ferulic acid
4421-08-3, 4-Hydroxy-3-methoxybenzonitrile
ROLE: AGR (Agricultural use); BIOL (Biological
study); USES (Uses)
(use of a sex pheromone, pheromone analogs, and
Verticillium lecanii for management of Heterodera
glycines on soybean)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4
CITINGS)

DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009

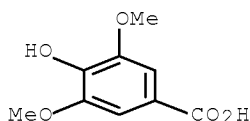
OS.CITING.REFS: CAPLUS 2001:376639; 1998:785095; 1998:457015; 1998:433815

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS
RECORD.

REFERENCE(S): (1) Ausher, R; Phytoparasitica 1975, V3, P133
(2) Bowers, W; Pest management:Biologically based
technologies 1993, P252
(3) Fravel, D; Phytopathology 1985, V75, P774
(4) Gintis, B; Nematropica 1983, V13, P181
(5) Greet, D; Nature 1964, V204, P96
(6) Hanssler, G; Journal of Plant Diseases and Protection
1981, V88, P678
(7) Hanssler, G; Journal of Plant Diseases and Protection
1990, V97, P194
(8) Harper, A; Environmental Entomology 1986, V15, P281
(9) Heintz, C; Vitis 1990, P229
(10) Huettel, R; Biological control of plant
diseases:Progress and challenges for the future
1992, P273
(11) Huettel, R; Plant nematology laboratory manual 1985,
P155
(12) Huettel, R; Proceedings of the Helminthological Society
of Washington 53 1986, P63
(13) Hussey, N; The role of biological control in pest
management 1984, P128
(14) Inscoe, M; Behavior-modifying chemicals for insect
management 1990, P631
(15) Jaffe, H; Journal of Chemical Ecology 1989, V15, P2031
ZCAPLUS
(16) Meyer, S; Journal of Nematology 1990, V22, P532 MEDLINE
(17) Meyer, S; Journal of Nematology 1995, V27, P409 MEDLINE
(18) Meyer, S; Journal of the Helminthological Society of
Washington 1992, V59, P237
(19) Meyer, S; Nematologica, in press 1996, V41
(20) Meyer, S; Pest management:Biologically based
technologies 1993, P214

- (21) Sas Institute; SAS/GRAPH Software:Usage, Version 6, 1st ed 1991
 (22) Stern, S; Journal of Nematology 1988, V20, P661
 (23) Uma, N; Transactions of the British Mycological Society 1987, V88, P335

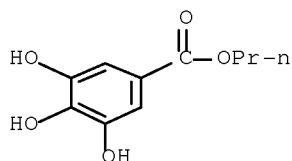
IT 530-57-4, Syringic acid
 RL: AGR (Agricultural use); BIOL (Biological study); USES
 (Uses)
 (use of a sex pheromone, pheromone analogs, and Verticillium lecanii for management of Heterodera glycines on soybean)
 RN 530-57-4 ZCAPLUS
 CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



L92 ANSWER 24 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1983:571245 ZCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 99:171245
 ORIGINAL REFERENCE NO.: 99:26211a,26214a
 ENTRY DATE: Entered STN: 12 May 1984
 TITLE: Interactions of the herbicides EPTC and EPTC + R-25788 with ozone and antioxidants in corn
 AUTHOR(S): Hatzios, Kriton K.
 CORPORATE SOURCE: Dep. Plant Pathol. Physiol., Virginia Polytechnic Inst. and State Univ., Blacksburg, VA, 24061, USA
 SOURCE: Journal of Agricultural and Food Chemistry (1983), 31(6), 1187-91
 CODEN: JAFCAU; ISSN: 0021-8561
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 CLASSIFICATION: 5-3 (Agrochemical Bioregulators)
 ABSTRACT:
 In greenhouse studies, the potential interactions of the herbicide EPTC (S-Et dipropylthiocarbamate) [759-94-4] with ozone [10028-15-6] or the antioxidants piperonyl butoxide [51-03-6] and propyl gallate [121-79-9] on corn (Zea mays Pioneer 3780) were investigated in the presence or absence of the herbicide ~~antidote~~ R25788 (N,N-diallyl-2,2-dichloroacetamide) [37764-25-3]. Com. formulations of EPTC (EPTAM) or EPTC plus R-25788 (ERADICANE) were incorporated into the soil at 4.5, 5.6, and 6.7 kg/ha, and they were evaluated against 0.2 and 0.3 ppm of O3 or against 4.5, 6.7, and 9.0 kg/ha of soil applications of the 2 antioxidants. The interactive effects between selected treatment combinations of EPTC plus R25788 and O3 or the 2 antioxidants were highly synergistic. In the absence of R25788, the interactive effects of EPTC with O3 or the 2 antioxidants were additive, although EPTC at 6.7 kg/ha combined with some rates of piperonyl butoxide interacted synergistically. The implications of these findings as to the potential mode of action of the ~~antidote~~ R-25788 are discussed.
 SUPPL. TERM: EPTC herbicide ~~antidote~~ ozone antioxidant
 INDEX TERM: 37764-25-3
 ROLE: BIOL (Biological study)
 (EPTC interaction with ozone or antioxidants in corn)

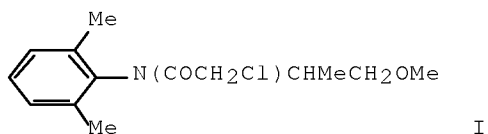
10/810211

response to)
INDEX TERM: 548-37-8
ROLE: BIOL (Biological study)
(EPTC interaction with ozone or antioxidants in,
herbicide ~~antidote~~ effect on)
INDEX TERM: 51-03-6 121-79-9 10028-15-6, biological
studies
ROLE: BIOL (Biological study)
(EPTC interaction with, in corn, herbicide
~~antidote~~ effect on)
INDEX TERM: 759-94-4
ROLE: BIOL (Biological study)
(ozone and antioxidants interaction with, in corn,
herbicide ~~antidote~~ effect on)
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2
CITINGS)
DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009
OS.CITING.REFS: CAPLUS 2002:241741; 1997:376246
IT 121-79-9
RL: BIOL (Biological study)
(EPTC interaction with, in corn, herbicide ~~antidote~~ effect
on)
RN 121-79-9 ZCAPLUS
CN Benzoic acid, 3,4,5-trihydroxy-, propyl ester (CA INDEX NAME)



L92 ANSWER 25 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1983:174745 ZCAPLUS Full-text
DOCUMENT NUMBER: 98:174745
ORIGINAL REFERENCE NO.: 98:26481a,26484a
ENTRY DATE: Entered STN: 12 May 1984
TITLE: Effects of CGA-43089 on responses of sorghum (Sorghum
bicolor) to metolachlor combined with ozone or
antioxidants
AUTHOR(S): Hatzios, Kriton K.
CORPORATE SOURCE: Dep. Plant Pathol., Virginia Polytech. Inst. and State
Univ., Blacksburg, VA, 24061, USA
SOURCE: Weed Science (1983), 31(2), 280-4
CODEN: WEESA6; ISSN: 0043-1745
DOCUMENT TYPE: Journal
LANGUAGE: English
CLASSIFICATION: 5-3 (Agrochemical Bioregulators)
GRAPHIC IMAGE:

10/810211



ABSTRACT:

In greenhouse studies, the potential interactive effects of metolachlor (I) [51218-45-2] treatments combined with the air pollutant O₃ or the antioxidants piperonyl butoxide [51-03-6] and propyl gallate [121-79-9], on the growth of sorghum (*S. bicolor*, Funk G522DR) seedlings that were protected or unprotected with the ~~antidote~~ CGA-43089 (II) [63278-33-1] were examined. I was applied preplant incorporated at rates of 2.2, 3.9, and 5.6 kg/ha, and it was evaluated against fumigation with O₃ at 0.2 and 0.3 ppm (volume) or against 4.9, 6.7, and 9.0 kg/ha of each antioxidant applied preplant incorporated. In combination treatments, shoot dry weight at 30 days after planting was reduced more than expected by I in the presence of the protectant II and O₃ or some rates of the 2 antioxidants, suggesting synergism. In the absence of II, growth responses of sorghum to combination treatments of I with O₃ or Pr gallate suggested an additive effect, although some treatments of I combined with piperonyl butoxide interacted synergistically.

SUPPL. TERM: sorghum CGA43089 metolachlor ozone antioxidant; piperonyl butoxide metolachlor sorghum CGA43089; propyl gallate metolachlor sorghum CGA43089

INDEX TERM: Sorghum
(metolachlor combined with antioxidants or ozone effect on, CGA43089 interaction in)

INDEX TERM: 51218-45-2
ROLE: BIOL (Biological study)
(sorghum response to antioxidants or ozone and, CGA43089 effect on)

INDEX TERM: 51-03-6 ~~121-79-9~~ 10028-15-6, biological studies
ROLE: BIOL (Biological study)
(sorghum response to metolachlor and, CGA43089 effect on)

INDEX TERM: 63278-33-1
ROLE: BIOL (Biological study)
(sorghum response to metolachlor combined with antioxidants or ozone interaction with)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009

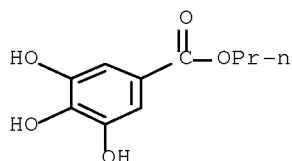
OS.CITING.REFS: CAPLUS 2002:241741; 1999:765978; 1997:376246

IT ~~121-79-9~~
RL: BIOL (Biological study)
(sorghum response to metolachlor and, CGA43089 effect on)

RN 121-79-9 ZCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, propyl ester (CA INDEX NAME)

10/810211



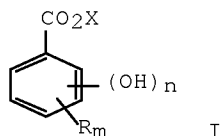
L92 ANSWER 26 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1983:121373 ZCAPLUS Full-text
DOCUMENT NUMBER: 98:121373
ORIGINAL REFERENCE NO.: 98:18425a,18428a
ENTRY DATE: Entered STN: 12 May 1984
TITLE: ~~Plant~~ growth regulators containing benzoates
PATENT ASSIGNEE(S): Chugai Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: ~~Patent~~
LANGUAGE: Japanese
INT. PATENT CLASSIF.: A01N037-10
CLASSIFICATION: 5-3 (Agrochemical Bioregulators)
Section cross-reference(s): 11
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57212105	A	19821227	JP 1981-95938	19810623 <--
PRIORITY APPLN. INFO.:			JP 1981-95938	19810623 <--

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 57212105	IC	A01N037-10
	IPCI	A01N0037-10
	IPCR	A01N0037-36 [I,C*]; A01N0037-40 [I,A]; A01N0037-10 [I,C*]; A01N0037-10 [I,A]

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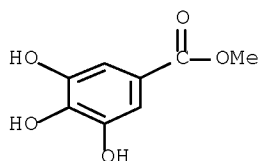


ABSTRACT:

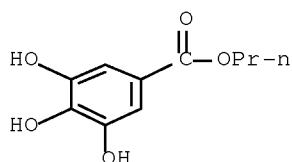
~~Plant~~ growth regulators contain I (X = H, metal, or alkyl; R = H, alkyl, or alkoxy; n = 1-3; m = 1-4), except 3,4,5-trihydroxybenzoic acid. Thus, an emulsion contains o-hydroxybenzoic acid [69-72-7] 40, clay 40, and talc 50 parts. The potentiation of cucumber growth was demonstrated by 20 ppm o-hydroxybenzoic acid.

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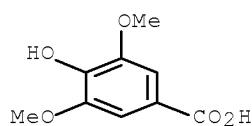
SUPPL. TERM: plant growth regulator benzoate
INDEX TERM: Plant hormones and regulators
ROLE: BIOL (Biological study)
(hydroxybenzoates)
INDEX TERM: 69-72-7, biological studies 69-72-7D, derivs. 89-86-1
99-06-9, biological studies 99-10-5 99-24-1
99-50-3 99-96-7, biological studies 118-61-6 119-36-8
121-79-9 303-07-1 303-38-8 490-79-9 499-76-3
530-57-4 578-36-9 2150-46-1 33580-60-8
ROLE: AGR (Agricultural use); BAC (Biological
activity or effector, except adverse); BSU (Biological
study, unclassified); BIOL (Biological study); USES (Uses)
(plant growth regulator)
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2
CITINGS)
DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009
OS.CITING.REFS: CAPLUS 2001:283721; 1999:40117
IT 99-24-1 121-79-9 530-57-4
RL: AGR (Agricultural use); BAC (Biological activity or
effector, except adverse); BSU (Biological study, unclassified); BIOL
(Biological study); USES (Uses)
(plant growth regulator)
RN 99-24-1 ZCAPLUS
CN Benzoic acid, 3,4,5-trihydroxy-, methyl ester (CA INDEX NAME)



RN 121-79-9 ZCAPLUS
CN Benzoic acid, 3,4,5-trihydroxy-, propyl ester (CA INDEX NAME)



RN 530-57-4 ZCAPLUS
CN Benzoic acid, 4-hydroxy-3,5-dimethoxy- (CA INDEX NAME)



L92 ANSWER 27 OF 27 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1947:19501 ZCAPLUS Full-text

DOCUMENT NUMBER: 41:19501

ORIGINAL REFERENCE NO.: 41:3902d-i,3903a-i,3904a-i,3905a-i,3906a-i,3907a-i,3908a-i,3909a-i,3910a-i,3911a-i,3912a-h

ENTRY DATE: Entered STN: 22 Apr 2001

TITLE: New growth-regulating compounds. I. Summary of growth-inhibitory activities of some organic compounds as determined by three tests

AUTHOR(S): Thompson, H. E.; Swanson, Carl P.; Norman, A. G.

CORPORATE SOURCE: Camp Detrick, Frederick, MD

SOURCE: Botanical Gazette (Chicago) (1946), 107, 476-507

CODEN: BOGAA5; ISSN: 0006-8071

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

CLASSIFICATION: 15A (Economic Poisons)

ABSTRACT:

cf. Newman, et al. C.A. 41, 3774i. Growth-regulating substances were prepared and subjected to 3 tests. In each a common reference material, (2,4-dichlorophenoxy)acetic acid (I), was employed and the results of any test were expressed as a percentage of the inhibition produced concurrently by I. The primary test, Test A (Corn Germination Test), involved the determination of inhibition of elongation of the primary root of germinating corn. Corn grains were germinated at 27° in Petri dishes containing 20 mL. of an aqueous solution of the compound to be tested at a concentration of 10 p.p.m. After 4 days of growth the length of the primary root of each plant was measured. Inhibition of growth was determined by subtracting the average length of the primary roots of the treated seeds from that of the control seeds, expressed in percentage. In Test B (Kidney-Bean Single-Droplet Water Test) kidney beans were placed in pots containing 1 lb. soil. After 7-10 days each plant was treated with 0.02 mL. of an aqueous solution containing 200 p.p.m. (4 γ) of the compound to be tested and 0.5% of Carbowax 1500. Treatment was applied to the upper surface of one of the primary leaves at a point along the midrib approx. one-eighth in. from the point of attachment of the blade and petiole. On the 10th day after treatment the fresh weight of that portion of each plant above the second node was determined Controls untreated and also treated with I were included in each test. Test C (Kidney-Bean Single-Droplet Oil Test) was essentially the same as Test B but 0.01 mL. of solution was applied containing 5γ in oil of the compound to be tested. Tri-Bu phosphate, at a concentration of 0.2%, was used as a co-solvent for compds. not directly soluble or miscible with oil. The introduction of I could be accomplished only in this way. Close numerical agreement was not necessarily expected between the 3 tests. The degree of inhibition produced by I in Tests B and C at different times of the year was not wholly identical and was affected by rate of growth. Test A was the most reproducible and formed the primary basis for detection of inhibitory activity and was reliable in separating those compds. that possess a high inhibitory activity for most broad-leaved plants from those with little or no activity at the same concentration Satisfactory agreement was found between Tests A and B with discrepancies in the direction of a lower activity by Test B. Variation between replications was greatest in Test C but the results were satisfactory in separating active inhibitors from those with low activity. Compds. showing high activity are promising for use as

herbicides. The compds. tested have been classified into groups according to activity and the results under 3 tests reported. The following, as Group I, are compds. possessing 80% or more of the activity of I in Test A:

(2-bromo-4-chlorophenoxy)acetic acid; Bu (2,4,5-trichlorophenoxy) acetate; (2-chloro-4-bromophenoxy)acetic acid; NH₄ 4-chlorocinnamate; α (4-chlorophenoxy)acetamide; (3-chlorophenoxy)acetic acid; 4-isomer; α -(2,4-dichlorophenoxy)acetamide; 2-(2,4-dichlorophenoxyacetamido)-1-butanol; Na 4-(2,4-dichlorophenoxyacetamido)-2,5-dichlorobenzenesulfonate; 2-(2,4-dichlorophenoxyacetamido)-2-ethyl-1,3-propanediol; 2-(2,4-dichlorophenoxyacetamido)-2-(hydroxymethyl)-1,3-propanediol; 2-(2,4-dichlorophenoxyacetamido)-2-methyl-1,3-propanediol; 2-(2,4-dichlorophenoxyacetamido)-1-naphthalenesulfonic acid; 8-(2,4-dichlorophenoxyacetamido)-1-naphthalenesulfonic acid; 8-(2,4-dichlorophenoxyacetamido)-1-naphthol-3,6-disulfonic acid; (3,4-dichlorophenoxy)acetic acid; 2,5-isomer; (2,4-dichlorophenoxy)acetic anhydride; α -(2,4-dichlorophenoxy)-4-sulfoacetanilide; (2,4-dichlorophenoxy)acetohydroxamic acid; (2,4-dichlorophenoxy) acetyl chloride; (2,4-dichlorophenoxyacetyl)guanidine; N-(2,4-dichlorophenoxyacetyl)urea; α -(2,4-dichlorophenoxy)butyric acid; 2-diethylaminoethyl (2,4-dichlorophenoxy)acetate; 2-diethylaminoethyl (2,4,5-trichlorophenoxy)acetate; 2,2-dimethyl-1,3-dioxolan-4-ylmethyl (2-methyl-4-chlorophenoxy)acetate; 1,4-bis(2,4,5-trichlorophenoxyacetamido)benzene; 1,3-isomer; Et (2,4-dichlorophenoxy)-acetate; Et (2-methyl-4-chlorophenoxy) acetate; Et 2-(2-methyl-4-chlorophenoxy) heptanoate; 2-hydroxyethyl (2,4-dichlorophenoxy)acetate; (2-iodo-4-chlorophenoxy)acetic acid; (2-methyl-4-bromophenoxy)acetic acid; (2-methyl-4-chlorophenoxy)acetamide; N-methyl- α -(4-chlorophenoxy)acetamide; 4-(2-methyl-4-chlorophenoxyacetamido)benzenesulfonic acid; 2-(2-methyl-4-chlorophenoxyacetamido)-6,8-naphthalenedisulfonic acid; 2-(2-methyl-4-chlorophenoxyacetamido)-1-naphthalenesulfonic acid; 8-(2-methyl-4-chlorophenoxyacetamido)-1-naphthalenesulfonic acid; 7-(2-methyl-4-chlorophenoxyacetamido)-1-naphthol-3,6-disulfonic acid; (2-methyl-4-chlorophenoxy)acetic acid; (2-methyl-6-chlorophenoxy)acetic acid; (2-methyl-4-chlorophenoxy)acetic anhydride; (2-methyl-4-chlorophenoxy)acetyl chloride; (2-methyl-4-fluorophenoxy)acetic acid; N-methyl- α -(2,4,5-trichlorophenoxy)acetamide; 2-nitro-2-methylpropyl (2,4-dichlorophenoxy)acetate; 2-nitro-2-methylpropyl (2-methyl-4-chlorophenoxy)acetate; Ph chloroacetate; Ph (2-methyl-4-chlorophenoxy)acetate; iso-Pr (2-methyl-4-chlorophenoxy)acetate; 2-(2,4,5-trichlorophenoxyacetamido)-2-(hydroxymethyl)-1,3-propanediol; α -(2,4,5-trichlorophenoxy)-N,N-bis(2-hydroxyethyl)acetamide; (2,4,5-trichlorophenoxy)acetic piperidide; α -(2,4,5-trichlorophenoxy)-3-chloroacetanilide; α -(2,4,5-trichlorophenoxy)-2,4-dimethylacetanilide; α -(2,4,5-trichlorophenoxy)-4-ethoxyacetanilide; α -(2,4,5-trichlorophenoxy)-4-methylacetanilide; α -(2,4,5-trichlorophenoxy)-2,4,6-trichloroacetanilide; [3-(trifluoromethyl)phenoxy] acetic acid; N-[tris(hydroxymethyl)methyl]-N-{2-hydroxy-3-[tris(hydroxymethyl)methylamino]-propyl}- α -(2,4-dichlorophenoxy)acetamide-HCl. The following, as Group II, are compds. possessing 50-79% of the activity of I in Test A:

2-aminoethanol bis-[(4-chlorophenoxy)acetate]; (4-bromophenoxy)acetic acid; O-(2-carboxymethoxy-3-methyl-5-bromobenzoyl)glycolic acid; O-(2-carboxymethoxy-3-methyl-5-nitrobenzoyl)glycolic acid; decyl dihydrogen orthophosphate; (2-chloro-4-tert-butylphenoxy)acetic acid; (2-chloro-4-iodophenoxy)acetic acid; 1-chloronaphthylacetic acid (mixture),

ammonium salt; 2-(4-chlorophenoxyacetamido)-1-naphthalenesulfonic acid;
 4-(4-chlorophenoxyacetamido)-1-naphthalenesulfonic acid;
 8-(4-chlorophenoxyacetamido)-1-naphthalenesulfonic acid;
 8-(4-chlorophenoxyacetamido)-1-naphthol-3,6-disulfonic acid;
 α -(4-chlorophenoxy)-N,N-bis(2-hydroxyethyl)acetamide;
 (4-chlorophenoxy)acetyl chloride; 2-(4-chlorophenoxyacetamido)-2-(
 hydroxymethyl)-1,3-propanediol; γ -(4-chlorophenoxy)-butyric acid;
 S-(4-chlorophenyl)thioglycolic acid; 2-butenyl (4-chlorophenoxy)acetate;
 (2,4-dibromophenoxy)acetic acid; α , β -dibromo- γ -phenylpropionyl
 chloride; 3,5-dichloro-2-bromobenzoic acid; (2,4-dichloro-5-bromophenoxy)acetic
 acid; (2,4-dichlorophenoxy)acetic piperidine;
 4-(2,4-dichlorophenoxyacetamido)-1-naphthalenesulfonic acid;
 (2,4-dichlorophenoxy)acetonitrile; N'-(2,4-dichlorophenoxyacetyl)betaine
 hydrazide hydrochloride; α -(2,4-dichlorophenoxy)-N,N-diethylacetamide;
 α -(2,4-dichlorophenoxy)-N-methylacetamide; NH₄
 γ -(2,4-dichlorophenoxy)butyrate; 2,4-dichlorophenylglycine;
 S-(2,5-dichlorophenyl)thioglycolyl chloride;
 2,2-dimethyl-1,3-dioxolan-4-ylmethyl (4-chlorophenoxy)-acetate;
 β -(2,4-dimethylphenoxy)propionic acid; 3,5-dimethylpyrazole; Et
 3-hydroxy-2-naphthoate; Et (2-methyl-4,6-dichlorophenoxy) acetate;
 2-hydroxy-3-methyl-5-bromobenzoic acid; 2-hydroxy-3-methyl-5-iodobenzoic acid;
 2-hydroxyethyl (4-chlorophenoxy)-acetate;
 N-2-hydroxyethyl- α -(2,4-dichlorophenoxy)acetamide;
 N-2-hydroxyethyl- α -(2-methyl-4-chlorophenoxy)-acetamide; 2-hydroxyethyl
 (2-methyl-4-chlorophenoxy)-acetate; 2-hydroxy-3-methylbenzoic acid;
 2-hydroxy-5-nitrobenzoic acid; (2-methyl-4-bromo-6-carboxyphenoxy)acetic acid;
 α -(3-methyl-4-chlorophenoxy)acetamide; Me (4-chlorophenoxy)acetate;
 (2-methyl-5-chlorophenoxy)acetic acid; (3-methyl-4-chlorophenoxy)-acetic acid;
 α -(2-methyl-4-chlorophenoxy)-N,N-bis(2-hydroxyethyl)acetamide;
 (3-methyl-4-chlorophenoxy)-acetyl chloride; Me (2,4-dibromophenoxy)acetate; Me
 (2,4-dimethylphenoxy) acetate; (2-methylphenoxy)acetyl chloride; Ph
 (4-chlorophenoxy)acetate; Ph (2,4-dichlorophenoxy)acetate;
 α -(2-propyl-4-chlorophenoxy)acetamide; α -(2,4,5-trichlorophenoxy)
 acetanilide; (2,4,5-trichlorophenoxy)acetonitrile;
 N-(2,4,5-trichlorophenoxyacetyl) bis[tris(hydroxymethyl) methylaminomethyl]
 carbinol hydrochloride. The following, as Group III, are compds. possessing
 30-49% of the activity of I in Test A: 4-aminoazobenzene; 2-(amylamino)ethyl
 diphenylacetate-HCl; (2-amyl-4-chlorophenoxy)acetic acid; isoamyl
 (2,4-dimethylphenoxy)acetate; 2-bromoethyl (4-chlorophenoxy)acetate;
 (2-bromophenyl)sulfamic acid; butylamine mercuric chloride; Bu
 (3-methylphenoxy)acetate; cacotheline; 1-(4-carboxyphenyl)-3-(3-
 chlorophenyl)urea; chloroacetamide; 4-chlorobenzoyl chloride;
 (4-chlorophenoxy)acetonitrile; 1-(4-chlorophenoxy)-2,3-epoxypropane;
 (4-chlorophenyl)acetic acid; N-(4-chlorophenyl)glycine;
 S-(4-chlorophenyl)thioglycolyl chloride;
 N-butyl-S-(4-chlorophenyl)thioglycolamide; [2-(cyanomethyl)-4-chlorophenoxy]
 acetic acid; NH₄ N,N-(cyclopentamethylene)dithiocarbamate;
 3,5-dibromo-2-aminobenzoic acid; 2,5-dichloroaniline mercuric chloride salt;
 (2,4-dichloro-5-aminophenoxy)-acetic acid; 2,4-dichlorocinnamic acid;
 α -(2,4-dichloro-6-methylphenoxy) acetamide;
 (2,4-dichloro-5-nitrophenoxy)acetic acid;
 (2,4-dichlorophenoxy)-N,N-bis(2-hydroxyethyl)acetamide;
 S-(2,5-dichlorophenyl)thioglycolic acid;
 1,1-bis(1-hydroxy-2,2,2-trichloroethyl)urea; 3,4-dimethylphenol;
 (2,4-dimethylphenoxy)acetic acid; 3,4-isomer; (2,4-dimethylphenoxy)acetyl
 chloride; S-(2,4-dinitrophenyl)thioglycolic acid; N,N-bis
 [tris(hydroxymethyl)methyl]ethylenediamine-di-HCl; Et
 [2-(chloromethyl)-4-chlorophenoxy]acetate; (2-ethyl-4-chlorophenoxy)acetic

acid; Et S-(4-chlorophenyl)thioglycolate; 2-hydroxy-3-carboxy-5-chlorotoluene; 4-hydroxy-3,5-dibromobenzoic acid; 2-hydroxyethyl 2,4-dichlorophenyl ether; N4-(iodoacetyl)sulfanilamide; 2-methyl-2-butylaminopropyl 4-(hexyloxy)benzoate-HCl; (2-methyl-4-chloro-6-carboxyphenoxy)acetic acid; Me(2-chlorophenoxy)acetate; 1-(2-methyl-4-chlorophenoxy)-2,3-epoxypropane; Me(2,4-dichlorophenoxy)acetate; (2-methylphenoxy)acetic acid; 4-nitrobenzoyl chloride; octyl dihydrogen orthophosphate; 2-isopropylaminoethyl 2-butoxybenzoate-HCl; Pr (2-methyl-4-chlorophenoxy)acetate; iso-Pr phenylcarbamate; Ba 3-pyridinesulfonate; sulfamerazine; 2,3,5-tribromobenzoic acid; 2,3,5-trichlorobenzoic acid; (2,2,2-trichloro-1-hydroxyethyl)urea; (2,4,6-trichlorophenoxy)acetic acid; (2,4,5-trichlorophenoxy)-2-nitroacetanilide; 2,4,6-trichlorophenyl phenylcarbamate; S-(2,4,5-trichlorophenyl)thioglycolamide; 1-[3-(trifluoromethyl)phenoxy]-2,3-epoxypropane; NH₄ 2,3,5-triiodobenzoate; N-[tris(hydroxymethyl)methyl]-N-{2-hydroxy-3-[tris(hydroxymethyl)methylamino]propyl}- α -(4-chlorophenoxy)acetamide-HCl.

The following, as Group IV-A, are compds. showing less than 29% of the activity of I in Test A and 50% or more of the activity of I in either Test B or Test C: α -amino- β -(2,4-dichlorophenoxy)propionamide; α -amino- β -(3-nitro-4-hydroxyphenyl)propionic acid nitrate salt; aminotetrazole; aniline; (benzylsulfonyl)acetic acid; 5-bromo-2-nitrobenzoic acid; 2-bromo-3-nitrobenzoic acid; NH₄ 2-bromo-3-nitrobenzoate; β -bromopropionic acid; 2-butylaminoethyl 4-butoxybenzoate-HCl; 2-isobutylaminoethyl 4-butoxybenzoate-HCl; 2-butylaminoethyl 4-ethoxybenzoate-HCl; 2-butylaminoethyl 4-methoxybenzoate-HCl; camphor oxime; N4-(carbo-2-chloroethoxy)sulfanilamide; (2-carbomethoxy-4-chlorophenoxy)acetic acid; (2-carboxy-4-chlorophenoxy)acetic acid; (2-carboxy-6-methylphenoxy)acetic acid; (2-carboxyphenoxy)acetic acid; [2-(carboxymethoxy)-3,5-dichlorobenzoyl]glycolic acid; chloroacetic acid; 2-chloroaniline; 3-chloroaniline; 4-chloroaniline; 4-chlorobenzyl mercaptan; 4-chlorobenzenesulfonyl chloride; 4-chlorobenzylisothiourea-HCl; 4-chloromandelic acid; (2-chloro-4-methylphenoxy)acetic acid; 2-chloro-3-nitrobenzoic acid; 2-chloro-5-nitrobenzoic acid; (2-chlorophenoxy)acetic acid; [2-(2-chlorophenyl)phenoxy]acetic acid; 4-chlorothiophenol; diazoaminobenzene; 2,4-dibromophenol; dichloroacetic acid; 2,4-dichloroaniline; 2,5-dichloroaniline; (2,4-dichlorobenzylsulfonyl)acetic acid; 2,4-dichlorobenzoic acid; 2,4-dichlorobenzylisothiourea-HCl; (2,4-dichloro-6-carboxyphenoxy)acetic acid; (2,6-dichloro-4-nitrophenoxy)acetic acid; 2,4-dichlorophenyl phenylcarbamate; (2,5-dichlorophenyl)sulfamic acid; 2,4-dihydroxypyrimidine; 2,4-dimethylphenol; (2,4-dinitrophenyl)acetic acid; N,N'-bis[tris(hydroxymethyl)methyl] hexamethylenediamine-di-HCl; 3-ethoxy-2-naphthoic acid; 2-ethylaminobutyl 4-ethoxybenzoate-HCl; Et carbamate; Et β -methyl- β -(4-chlorophenyl)glycidate; 3-ethyl-4-methylpyridine; Et (2-propyl-4-chlorophenoxy)acetate; (2-fluorophenoxy)acetic acid; 2-hydroxy-3-bromo-5-chlorobenzoic acid; 2-hydroxy-3-methyl-5-nitrobenzoic acid; N-(2-hydroxy-3-chloropropyl)-p-toluidine; 2-hydroxy-3,5-dinitrobenzoic acid; 4-iodobenzoic acid; 2-methoxyphenol; 4-methoxyphenol; 2-methyl-2-aminopropyl diphenylacetate-HCl; 2-methyl-5-chlorophenol; 2-methyl-6-chlorophenol; (2-methyl-4-chlorophenoxy)fumaric acid; Me 3-chlorophenylcarbamate; 2-methyl-4,6-dichlorophenol; 2-methyl-2-hexylaminopropyl 4-ethoxybenzoate-HCl; Me (2-methyl-6-chlorophenoxy)acetate; (4-methylphenoxy)acetic acid; Me phenylthiocarbamate; S-(2-methylphenyl)thioglycolic acid; 4-methyl-4-(trichloromethyl)-2,5-cyclohexadien-1-one O-carboxymethyloxime; 2-nitrobutyl phenylcarbamate; 1-phenyl-3-methyl-5-pyrazole; phthalic acid; α -pinene; 2-isopropylaminoethyl 4-butoxybenzoate-HCl; (2-propyl-4-chlorophenoxy)acetic acid; iso-Pr (2,4-dimethylphenoxy)acetate; iso-Pr (2-methyl-6-chlorophenoxy)acetate; 3-propyl-2-naphthoic acid; iso-Pr

(2-propyl-4-chlorophenoxyacetate); trichloroacetamide; trichloroacetic acid; trichloroacetyl chloride; 2,4,5-trichlorobenzenesulfonamide; 3,4,5-trihydroxybenzoic acid; N-[tris(hydroxymethyl)methyl]-2,3-dibromopropylamine-HBr; salicylic acid. The following, as Group IV-B, are compds. insufficiently soluble in water for Test A to be performed but exhibiting 50% or more of the activity of I in either Test B or Test C: allyl (4-chlorophenoxy)acetate; allyl (2,4-dichlorophenoxy)acetate; 2-aminonaphthoic acid; amyl (2,4-dichlorophenoxy)acetate; isoamyl (2,4-dichlorophenoxy)acetate; amyl 1-naphthalenecarbamate; bis-(4-chlorophenyl) (trichloromethyl)methane; 1,1'-(bis-2-naphthol)phenylmethane; 2-bromo-3,5-dichlorobenzamide; 2-bromo-3,5-dichlorobenzanilide; 2,2'-dibromo-3,5-dichlorobenzanilide; 2,3'-dibromo-3,5-dichlorobenzanilide; 2,4'-dibromo-3,5-dichlorobenzanilide; 2-bromo-3,3',5-trichlorobenzanilide; 2-bromo-2',3,4',5-tetrachlorobenzanilide; 2-bromo-3,5-dichloro-m-benzotoluidide; 2-bromo-3,5-dichlorobenzoyl chloride; 2-bromoethyl (2,4-dibromophenoxy) acetate; 2-bromoethyl (2,4-dichlorophenoxy) acetate; α -(4-bromophenoxy)acetamide; 1-(3-bromophenyl)-3-(2-chlorophenyl)urea; 1-(3-bromophenyl)-3-(3-chlorophenyl)urea; Bu (2,4-dichlorophenoxy)acetate; iso-Bu (2,4-dichlorophenoxy)acetate; 1-carbethoxy-3-(3-chlorophenyl)urea; 2-chloroethyl (4-chlorophenoxy)acetate; 2-chloroethyl (2,4-dibromophenoxy)acetate; 2-chloroethyl (2,4-dichlorophenoxy)acetate; 2-chloroethyl (2-methyl-4-chlorophenoxy)acetate; 2-chloroethyl 1-naphthalenecarbamate; 2-chloroethyl phenylcarbamate; α -(4-chlorophenoxy)-p-acetanisidide; α -(4-chlorophenoxy)-2-bromoacetanilide; α -(4-chlorophenoxy)-3-bromoacetanilide; α -(4-chlorophenoxy)-4-bromoacetanilide; α -(4-chlorophenoxy)-2-chloroacetanilide; α -(4-chlorophenoxy)-3-chloroacetanilide; α -(4-chlorophenoxy)-2,4-dimethylacetanilide; α -(4-chlorophenoxy)-4-ethoxyacetanilide; 1-(4-chlorophenoxyacetyl)-2-phenylhydrazine; α -(4-chlorophenoxy)-4-iodoacetanilide; α -(4-chlorophenoxy)-3-nitroacetanilide; α -(4-chlorophenoxy)-p-acetotoluidide; α -(4-chlorophenoxy)-N-p-xenylacetamide; γ -(4-chlorophenoxy)butyronitrile; 4-chlorophenyl (4-chlorophenoxy)acetate; 1-(4-chlorophenyl)-3-(2-chlorophenyl) urea; 4-chlorophenyl (2,4-dichlorophenoxy)acetate; 1-(3-chlorophenyl)-3,3-(cyclopentamethylene)urea; 1-(3-chlorophenyl)-3-phenylurea; S-(4-chlorophenyl)-2-bromothioglycolanilide; S-(4-chlorophenyl)-3-bromothioglycolanilide; 4-chlorophenyl (2,4,5-trichlorophenoxy)acetate; 2,6-dibromobenzoquinone-4-chloroimide; 2,4-dichlorobenzylsulfonyl chloride; 1,3-bis(4-chlorophenoxyacetamido)benzene; 1,4-isomer; 4,4'-bis(4-chlorophenoxyacetamido)biphenyl; 2,4-bis(4-chlorophenoxyacetamido)toluene; α -(2,4-dichlorophenoxy)acetanilide; α -(2,4-dichlorophenoxy)-N-(2-aminoethyl)acetamide; α -(2,4-dichlorophenoxy)-p-acetanisidide; α -(2,4-dichlorophenoxy)-2,5-dichloroacetanilide; α -(2,4-dichlorophenoxy)-2,4-dimethylacetanilide; 1-(2,4-dichlorophenoxyacetyl)-2-(2,4-dinitrophenyl)hydrazine; (2,4-dichlorophenoxy)acetic hydrazide; α -(2,4-dichlorophenoxy)aceto-2-naphthalide; α -(2,4-dichlorophenoxy)-p-acetotoluidide; α -(2,4-dichlorophenoxy)-N-o-xenylacetamide; 4-(2,4-dichlorophenoxyacetamido)azobenzene; (2,4-dichlorophenoxy)acetylaminoguanidine; (2,4-dichlorophenoxy)acetyl bromide;

α -(2,4-dichlorophenoxy)-N-(hydroxy-tert-butyl)acetamide;
 S-(2,4-dichlorophenoxyacetyl)isothioureia;
 1-(2,4-dichlorophenoxyacetyl)-2-methyl-2-thioisoureia;
 γ -(2,4-dichlorophenoxy)butyric acid;
 γ -(2,4-dichlorophenoxy)butyronitrile; 2,4-dichlorophenyl
 (4-chlorophenoxy)acetate; 2,4-dichlorophenyl (2,4-dichlorophenoxy)acetate;
 1-(2,5-dichlorophenyl)-3-phenylurea; S-(2,5-dichlorophenyl)thioglycolamide;
 4,4'-bis(2,4-dichlorophenoxyacetamido)biphenyl; 1,4-bis
 (2,4-dimethylphenoxyacetamido)benzene; 2,4-bis(2,4-
 dimethylphenoxyacetamido)toluene; 2,4-dichlorophenyl
 (2,4,5-trichlorophenoxy)acetate; 2,4-dichlorophenyl (4-chlorophenoxy)acetate;
 2,3-dichloropropyl (2,4-dibromophenoxy)acetate; 2,3-dichloropropyl
 (2,4-dichlorophenoxy)acetate; 2-diethylaminoethyl 2,3,5-triiodobenzoate;
 3,3'-dimethyl-4,4'-bis(4-chlorophenoxyacetamido)biphenyl;
 3,3'-dimethyl-4,4'-bis(2-methylphenoxyacetamido)biphenyl;
 1,3-bis(2-methylphenoxyacetamido)benzene; 1,4-isomer;
 4,4'-bis(2-methylphenoxyacetamido)biphenyl;
 4,4'-bis(2,4-dimethylphenoxyacetamido)biphenyl;
 1-(4-ethoxyphenyl)-3-phenylurea; Et 2-bromo-3,5-dichlorobenzoate; Et
 (4-bromophenoxy)acetate; Et (4-chlorophenoxy)acetate; 2-ethylhexyl
 (2,4-dichlorophenoxy)acetate; methallyl (4-chlorophenoxy)acetate;
 2-methoxy-4-methylphenyl 1-naphthalenecarbamate; Me 2-bromo-3-nitrobenzoate;
 4-(2-methyl-4-chlorophenoxyacetamido)azobenzene;
 α -(2-methyl-6-chlorophenoxy)-2,5-dichloroacetanilide;
 2-methyl-4-chlorophenyl (2,4-dichlorophenoxy)acetate;
 1-methyl-2,4-bis(2,4-dichlorophenoxyacetamido)benzene; Me
 4-nitrophenylcarbamate; Me (2,4,5-trichlorophenoxy)acetate;
 (2-hydroxy-1-naphthyl)-1-piperidylphenylmethane; 2-nitrobutyl
 (2,4,5-trichlorophenoxy)acetate; 4-nitro-N,N-dimethylaniline; octyl
 (2,4-dichlorophenoxy)acetate; pentachlorophenyl
 (2,4,5-trichlorophenoxy)acetate; 1-phenyl-3,3-cyclopentamethyleneurea; Ph
 phenylcarbamate; Ph (2,4,5-trichlorophenoxy)acetate; iso-Pr
 (2,4-dichlorophenoxy)acetate; 3-isopropoxy-2-naphthoic acid;
 1,3-di-m-tolyl-urea; (2,4,5-tribromo-3,5-dimethylphenoxy)acetic acid;
 2,4,6-tribromophenyl acetate; 2,4,5-trichlorobenzamide; trichloroethyl
 (2,4-dibromophenoxy)acetate; 2,2,2-trichloroethyl (2,4-dichlorophenoxy)acetate;
 2,4,5-trichlorophenoxyacetic acid; 2-(2,4,5-
 trichlorophenoxyacetamido)anthraquinone;
 α -(2,4,5-trichlorophenoxy)-4-bromoacetanilide;
 α -(2,4,5-trichlorophenoxy)-4-methoxyacetanilide;
 (2,4,5-trichlorophenoxy)aceto-2-naphthalide;
 α -(2,4,6-trichlorophenoxy)-4-sulfoacetanaphthalide;
 α -(2,4,5-trichlorophenoxy)-m-acetotoluidide;
 (2,4,5-trichlorophenoxy)acetyl chloride;
 1-(2,4,5-trichlorophenoxyacetyl)-2-(p-nitrophenyl)hydrazine;
 2,4,6-trichlorophenyl (4-chlorophenoxy)acetate; 2,4,6-trichlorophenyl
 (2,4-dichlorophenoxy)acetate; 2,4,6-trichlorophenyl
 (2,4,5-trichlorophenoxy)acetate; N-[3-(trifluoromethyl)phenyl]- α -(4-
 chlorophenoxy)acetamide; N-[3-(trifluoromethyl)phenyl]- α -(2,4,5-
 trichlorophenoxy)acetamide; 2,3,5-triiodobenzoic acid; 2,3,5-triiodobenzoyl
 chloride; 1-[tris(hydroxymethyl)methylamino]-2,4-dinitrobenzene;
 N-(p-xenyl)- α -(2,4-dichlorophenoxy)acetamide.

The following, as Group IV-C, were also examined by the three tests and showed
 relatively low activity as compared with I: 2-acetoxyethyl
 1-naphthalenecarbamate; 2-acetoxyethyl phenylcarbamate;
 (2-acetyl-4-chlorophenoxy)acetic acid; (2-allyl-4-chlorophenoxy)acetic acid;
 allyl 1-naphthalenecarbamate; allyl phenylcarbamate; allyl 4-tolyl sulfone;
 1-aminoanthraquinone; 2-isomer; 4-aminobenzyl

tris(hydroxymethyl)methylamine-di-HCl; 2-amino-3,5-dichlorobenzoic acid;
 2-aminoethylsulfuric acid; 8-amino-1-naphthol-3,6-disulfonic acid;
 1-amino-2-naphthol-4-sulfonic acid; 4-aminophenol; (2-aminophenoxy)acetic acid;
 (4-aminophenyl)acetic acid; 2-aminopyridine; 2-aminothiazole; 2-amylaminoethyl
 4-butoxybenzoate-HCl; isoamyl formate; amyl (2-methylphenoxy)acetate; isoamyl
 1-naphthalenecarbamate; 4-tert-amylphenol; amyl phenylcarbamate; isoamyl
 phenylcarbamate; (4-arsonophenoxy)acetic acid; benzoic acid;
 4-benzylaminophenol-HCl; benzyl Bu sulfone; allyl (benzylsulfonyl)acetate; Me
 (benzylsulfonyl)acetate; N-benzyl-N,N'-bis[tris(hydroxymethyl)methyl]-2-hydroxy-
 1,3-diaminopropane; benzyl Et sulfone; benzyl Me sulfone; benzyl 4-tolyl
 sulfone; benzyl[tris(hydroxymethyl)methyl]amine; 1,3-bis{
 [tris(hydroxymethyl)methyl]amino}-2-propanol-HCl; 2-bromobenzamide;
 2-bromobenzanilide; 2-bromo-2',4'-dichlorobenzanilide; 2-bromobenzoic acid;
 3-isomer; NH₄ 4-bromobenzoate; 4-bromobenzonitrile;
 (2-bromo-4-tert-butylphenoxy)acetic acid;
 2-bromo-3,5-dichloro-N-butylbenzamide; 2-bromo-3,4',5-trichlorobenzanilide;
 2-bromoethylamine; 2-bromoethyl 4-ethoxythiolbenzoate; 2-bromoethyl
 (2-methyl-4-chlorophenoxy)acetate; 2-bromo-4-nitrobenzoic acid;
 2-bromo-5-nitrobenzoic acid; NH₄ 2-bromo-5-nitrobenzoate;
 3-bromo-4-nitrobenzoic acid; 3-bromo-5-nitrobenzoic acid; 4-bromophenol;
 (2-bromophenoxy)acetic acid; α -(4-bromophenoxy)-4-bromoacetanilide;
 α -(4-bromophenoxy)-4-chloroacetanilide;
 α -(4-bromophenoxy)-2,5-dichloroacetanilide; 3-bromophenylammonium
 fluoroborate; 4-bromophenylammonium fluoroborate;
 1-(2-bromophenyl)-3-(2-chlorophenyl)urea;
 1-(4-bromophenyl)-3-(3-chlorophenyl)urea;
 1-(2-bromophenyl)-3-(3-chlorophenyl)urea;
 N-(4-bromophenyl)-3-(2-chlorophenyl)urea; NH₄ (4-bromophenyl)dithiocarbamate;
 4-bromophenyl 1-naphthalenecarbamate; (2-bromo-4-phenylphenoxy)acetic acid;
 4-bromophenyl phenylcarbamate; 1-(2-bromophenyl)-3-phenylurea;
 1-(3-bromophenyl)-3-phenylurea; 1-(4-bromophenyl)-3-phenylurea;
 3-bromophenylsulfamic acid; N-(3-bromophenyl)
 α,α,α -trichloroacetamide; 2-butylaminoethyl
 2-butoxybenzoate-HCl; 2-butylaminoethyl diphenylacetate-HCl; 2-butylaminoethyl
 4-(heptyloxy)benzoate-HCl; 2-butylaminoethyl 4-propoxybenzoate-HCl;
 2-butylaminoethyl 2-(thiobutoxy)benzoate; (2-sec-butyl-4-chlorophenoxy)acetic
 acid; Hg butyldithiocarbamate; Bu 1-naphthalenecarbamate; iso-Bu
 1-naphthalenecarbamate; 4-tert-butylphenol; Bu phenylcarbamate; iso-Bu
 phenylcarbamate; tert-Bu phenylcarbamate; 1-butyl-3-phenylthiourea;
 N-butyl- α -(2,4,5-trichlorophenoxy)acetamide;
 4-carbethoxy-6-methoxyquinoline; 1-carbethoxy-3-phenylurea; 1-carbobutoxyethyl
 1-naphthalenecarbamate; 1-carboisopropoxyethyl 1-naphthalenecarbamate;
 O-(2-carboxymethoxybenzoyl)glycolic acid;
 O-(2-carboxymethoxy-3-methyl-5-chlorobenzoyl)glycolic acid; NH₄
 (carboxymethyl)dithiocarbamate; Na (4-carboxymethylphenyl)dithiocarbamate;
 2-carboxy-6-methylphenyl phenylcarbamate; NH₄ (4-carboxyphenyl)dithiocarbamate;
 4-carboxyphenylglycine; o-carboxyphenyl 1-naphthalenecarbamate;
 1-(4-carboxyphenyl)-3-(1-naphthyl)urea; 4-carboxyphenyl phenylcarbamate;
 S-(4-carboxyphenyl)thioglycolic acid; N₄-(β -carboxypropionyl)sulfanilamide;
 pyrocatechol; chloroacetyl chloride; 4-chloroanisole; 2-chlorobenzaldehyde
 O-carboxymethyloxime; 2-chlorobenzaldehyde oxime; 4-chlorobenzamide;
 4-chlorobenzenesulfonamide; 4-chlorobenzoic acid; bis(4-chlorobenzyl)disulfide;
 S-(4-chlorobenzyl)thioglycolic acid; bis(4-chlorobenzyl)sulfide;
 (4-chlorobenzyl)sulfonyl)acetic acid; 4-chlorocinnamic acid; highly chlorinated
 1,5-dihydroxynaphthalene; 2-chloroethyl (2-propyl-4-chlorophenoxy)acetate;
 chlorohydroquinone; chlorohydroquinone-0,0-diacetic acid;
 4-(chloromercuri)phenol; [4-(chloromercuri)phenoxy]acetic acid;
 [2-(chloromethyl)-4-chlorophenoxy]acetic acid;
 2-chloro-4-methyl-6-methoxyquinoline; 2-chloro-4-methylquinoline;

(7-chloro-1-naphthoxy)acetic acid; 1-chloronaphthylacetic acid mixture;
 4-chlorophenetole; 1-(4-chlorophenoxyacetamido)naphthalene;
 2-(4-chlorophenoxyacetamido)naphthalene;
 α -(4-chlorophenoxy)-2,5-dichloroacetanilide;
 α -(4-chlorophenoxy)-N,N-diethyl-acetamide; (4-chlorophenoxy)acetic
 piperidide; α -(4-chlorophenoxy)-2-nitroacetanilide;
 α -(4-chlorophenoxy)-2,4,6-trichloroacetanilide;
 (4-chlorophenoxy)(4-chlorophenyl)acetic acid; (4-chlorophenoxy)fumaric acid;
 2-(4-chlorophenoxy)heptanoic acid; β -(4-chlorophenoxy)propionic acid;
 β -(4-chlorophenoxy)propionitrile; 4-chlorophenylammonium fluoroborate;
 1-(2-chlorophenyl)-3-butylurea; 1-(3-chlorophenyl)-3-butylurea;
 1-(2-chlorophenyl)-1-(4-carboxyphenyl)urea;
 N-(3-chlorophenyl)- α -chloroacetamide; 4-isomer;
 1-(3-chlorophenyl)-3-(2-chlorophenyl) urea;
 1-(4-chlorophenyl)-3-(3-chlorophenyl) urea;
 3-(2-chlorophenyl)-1,1-cyclopentamethyleneurea; NH₄
 (4-chlorophenyl)dithiocarbamate; 2-chloro-1,4-phenylene bis(phenylcarbamate);
 N-(2-chlorophenyl)glycine; 1-(2-chlorophenyl)-3-(2-hydroxyethyl) urea; 3-chloro
 isomer; 3-chlorophenyl isocyanate; 1-(2-chlorophenyl)-3-(1-naphthyl) urea;
 4-isomer; [2-(4-chlorophenyl)phenoxy]acetic acid;
 1-(2-chlorophenyl)-3-phenylurea; 4-chloro isomer;
 1-(2-chlorophenyl)-3-phenylthiourea; 3-isomer; 4-isomer; Na
 (3-chlorophenyl)sulfamate; (4-chlorophenyl)sulfamic acid;
 S-(2-chlorophenyl)thioglycolic acid; S-(4-chlorophenyl)thioglycolamide;
 S-(4-chlorophenyl)thioglycolanilide; S-(4-chlorophenyl)-4'-
 bromothioglycolanilide; S-(4-chlorophenyl)thioglycol-p-phenetidine;
 S-(4-chlorophenyl)thioglycol-m-toluidine; 1-(2-chlorophenyl)urea; 3-isomer;
 1,3-bis(2-chlorophenyl)urea; 3-isomer; cinnamic acid; cinnamoyl chloride;
 o-cresol; m-isomer; p-isomer; 4-toloxycetyl chloride; cyanoacetamide;
 (2-cyclohexyl-4-chlorophenoxy)acetic acid; (decyl-mercapto)acetic acid;
 (decylsulfonyl)acetic acid; bis(2-acetoxyethyl) sulfone; 2,6-diaminopyridine
 monohydrochloride; 2,6-dibromo-4-carboxyphenyl phenylcarbamate;
 α , β -dibromodihydrocinnamic acid; 4,6-dibromo-1,3-dihydroxybenzene;
 (2,6-dibromo-4-methylphenoxy)acetic acid; 2,4-dibromophenyl phenylcarbamate;
 α , β -dibromo- γ -phenylpropionamide; bis(2-butyroxyethyl)
 sulfone; 2,5-dichloro-4-aminobenzenesulfonic acid; 2,4-dichloroanisole;
 2,6-dichlorobenzenoneindophenol sodium salt; 2,5-dichlorobenzenesulfonamide;
 2,5-dichlorobenzenesulfonyl chloride; (2,4-dichlorobenzylmercapto)acetic acid;
 bis(2,4-dichlorobenzyl)disulfide; 2,4-dichlorobenzyl mercaptan;
 bis(2,4-dichlorobenzyl)sulfide; bis(2,4-dichlorobenzyl)sulfone;
 5,7-dichloro-3-coumaranone; N,2,4-trichloroacetanilide;
 2,6-dichloro-3-ethyl-4-methylpyridine; 2,4-dichloromandelic acid;
 2,6-dichloro-4-methyl-5-ethylnicotinamide; (2,6-dichloro-4-methylphenoxy)acetic
 acid; (2,4-dichloro-6-methylphenoxy)acetyl chloride;
 (2,4-dichloro-1-naphthoxy)acetic acid; 2,4-dichlorophenetole;
 2,4-dichlorophenol; 1-(2,4-dichlorophenoxyacetamido)anthraquinone;
 2-(2,4-dichlorophenoxyacetamido)anthraquinone; (2,6-dichlorophenoxy)acetic
 acid; 3,5-isomer; α -(2,4-dichlorophenoxy)-4-bromoanilide;
 α -(2,4-dichlorophenoxy)-4-chloroacetanilide;
 α -(2,4-dichlorophenoxy)-p-acetophenetide;
 α -(2,4-dichlorophenoxy)-N-(2-hydroxyethyl)acetamide;
 2,4-dichlorophenoxyaceto-1-naphthalide;
 α -(2,4-dichlorophenoxy)-2-nitroacetanilide;
 α -(2,4-dichlorophenoxy)-3-nitroacetanilide;
 1-(2,4-dichlorophenoxyacetyl)-2-(p-nitrophenyl)hydrazine;
 α -(2,4-dichlorophenoxy)-N-2'-pyridylacetamide;
 α -(2,4-dichlorophenoxy)-2,4,6-trichloroacetanilide;

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2-(2,4-dichlorophenoxyacetamido)-6,8-naphthalenedisulfonic acid;
1-(2,4-dichlorophenoxyacetyl)-1-phenylsemicarbazide;
(2,4-dichlorophenoxy) (p-chlorophenyl)acetic acid;
1-(2,4-dichlorophenoxy)-2,3-epoxypropane; (2,4-dichlorophenoxy) fumaric acid;
Addnl. information in printed abstract

INDEX TERM: Weed control
(growth substances in, testing on broadleaf plants)

INDEX TERM: Fluoborates
(of organic bases, growth inhibition of plants by)

INDEX TERM: Plant regulators
(reviews on)

INDEX TERM: 1,3-Propanediol, 2-(p-aminobenzylamino)-2-(hydroxymethyl)-, dihydrochloride
1-Naphthaleneacetic acid, ar-chloro-
1-Naphthaleneacetic acid, ar-chloro-, ammonium salt
2-Naphthol-3,6-disulfonic acid, carbanilate, disodium salt
2',4'-Benzoxylidide, 4'-nitro-
Acetamide, 2-(2,5-dichlorophenylthio)-N,N-diphenyl-
Acetamide, 2-(4,?,?-trichloro-o-tolyloxy)-
Acetamide, 2-(4,?,?-trichloro-o-tolyloxy)-
Acetamide, N,N'-(4-methyl-m-phenylene)bis[2-(2,4-dichlorophenoxy)-
Acetamide, N-amidino-2-(2,4-dichlorophenoxy)-
Acetic acid, (4,?,?-trichloro-o-tolyloxy)-
Acetic acid, (tribromoxylyloxy)-
Acetic acid, [2-bromo-2-chlorophenoxy]-
Acetic acid, [4-bromo-4-chlorophenoxy]-
Aniline, fluoborate
Aniline, m-bromo-, fluoborate
Benzoic acid, bromodichloro-, pentachlorophenyl ester
Butylamine, compound with HgCl₂
Butyric acid, sulfonyldiethylene ester
Carbanilide, ar',2,5-trichloro-
Ethylenediamine, N,N-bis[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]-, dihydrochloride
Glutaconic acid, cyanoethyl-3-methyl-, diethyl ester
Glycine, 2-(2,4-dichlorophenyl)-
Glycolic acid, α -carboxy-3,5-dichloro-o-anisate
Glycolic acid, α -carboxy-5-chloro-3-methyl-o-anisate
Indophenol, 2,6(or 3',5')-dichloro-, sodium salt
Nicotinonitrile, 5-ethyl-2,6-dihydroxy-4-methyl-, 6-mono-
Phenol, p-bromo-, carbamates
Quininic acid, ethyl ester
Sulfamic acid, (2,4,6-trichlorophenyl)-, sodium salt
Urea, (2-diethylamino-2-ethylbutyryl)-
Urea, (chlorophenyl)(2,5-dichlorophenyl)-
o-Anisic acid, α -carboxy-3,5-dichloro-, carboxymethyl ester
o-Anisic acid, α -carboxy-5-chloro-3-methyl-, carboxymethyl ester
(growth inhibition of plants by)

INDEX TERM: 5438-19-7, Benzoic acid, p-propoxy- 15872-42-1, Benzoic acid, p-(heptyloxy)-
(alkylaminoalkyl ester hydrochlorides, growth inhibition of plants by)

INDEX TERM: 619-86-3, Benzoic acid, p-ethoxy-
(alkylaminoalkyl ester, hydrochlorides, growth inhibition

of plants by)

INDEX TERM: 1498-96-0, Benzoic acid, p-butoxy-
(alkylaminoalkyl esters and their hydrochlorides, growth inhibition of plants by)

INDEX TERM: 83-56-7, 1,5-Naphthalenediol
(and chlorinated derivs., growth inhibition of plants by)

INDEX TERM: 88-82-4, Benzoic acid, 2,3,5-triiodo- 573-54-6, Benzoic acid, 2-bromo-3-nitro- 943-14-6, Benzoic acid, 2-bromo-5-nitro- 16426-64-5, Benzoic acid, 2-bromo-4-nitro-
(and derivs., growth inhibition of plants by)

INDEX TERM: 93-76-5, Acetic acid, (2,4,5-trichlorophenoxy)-
(and esters, and hydrazides, growth inhibition of plants by)

INDEX TERM: 79-11-8, Acetic acid, chloro- 83-40-9, 2,3-Cresotic acid 88-06-2, Phenol, 2,4,6-trichloro- 94-74-6, Acetic acid, (4-chloro-o-tolyloxy)- 120-83-2, Phenol, 2,4-dichloro- 10129-78-9, Acetic acid, (2,4-dibromophenoxy)- 13333-87-4, Acetic acid, (4,6-dichloro-o-tolyloxy)- 13334-49-1, Acetic acid, 2,4-xylyloxy- 19094-75-8, Acetic acid, (6-chloro-o-tolyloxy)- 28203-59-0, Acetic acid, (benzylsulfonyl)- 105041-59-6, Acetic acid, (4-chloro-2-propylphenoxy)-
(and esters, growth inhibition of plants by)

INDEX TERM: 108-95-2, Phenol
(as growth inhibitor for plants)

INDEX TERM: 583-23-3, Acetic acid, (2-chloro-p-tolyloxy)- 588-20-5, Acetic acid, (4-chloro-m-tolyloxy)- 6964-28-9, Acetic acid, (4-chloro-2-ethylphenoxy)- 19774-97-1, Acetic acid, (4-chloro-2-cyclohexylphenoxy)- 102237-13-8, Acetic acid, (4-chloro-2-pentylphenoxy)- 439675-58-8, Acetic acid, (4-chloro-2-iodophenoxy)- 501008-64-6, Acetic acid, (4-chloro- α -cyano-o-tolyloxy)-
(as growth substance)

INDEX TERM: 90-15-3, 1-Naphthol 122-59-8, Acetic acid, phenoxy- 135-19-3, 2-Naphthol 940-64-7, Acetic acid, p-tolyloxy-
(as plant regulator)

INDEX TERM: 120-80-9, Pyrocatechol
(as plant-growth regulator)

INDEX TERM: 69-72-7, Salicylic acid
(carboxymethyl ester growth inhibition of plants by)

INDEX TERM: 328-42-7, Oxalacetic acid
(cyclic derivative with aminoguanidine growth inhibition of plants by)

INDEX TERM: 98-67-9, 1-Phenol-4-sulfonic acid
(derivs., growth inhibition of plants by)

INDEX TERM: 94-75-7, Acetic acid, (2,4-dichlorophenoxy)-
(derivs., plant-growth inhibition by)

INDEX TERM: 112-92-5, 1-Octadecanol
(detergents from coconut oil monoglyceride sulfate, with 2,4-D, growth inhibition of plants by)

INDEX TERM: 3147-55-5, Salicylic acid, 3,5-dibromo-
(effect on plant growth)

INDEX TERM: 50-29-3, Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)-
(effect on plant mitosis)

INDEX TERM: 2200-81-9, Benzoic acid, o-butoxy-
(esters and their hydrochlorides, growth inhibition of plants by)

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INDEX TERM: 75-13-8, Isocyanic acid 501-82-6, Carbanilic acid
(esters of, growth inhibition of plants by)

INDEX TERM: 87-86-5, Phenol, pentachloro- 93-51-6, Creosol 100-37-8,
Ethanol, 2-diethylamino- 107-07-3, Ethanol, 2-chloro-
111-75-1, Ethanol, 2-butylamino- 115-20-8, Ethanol,
2,2,2-trichloro- 123-51-3, Isopentyl alcohol 540-51-2,
Ethanol, 2-bromo- 609-31-4, 1-Butanol, 2-nitro-
1643-15-8, Acetic acid, m-tolyloxy- 2580-77-0, Ethanol,
2,2'-sulfonyldi- 35161-67-2, Ethanol, 2-pentylamino-
(esters, growth inhibition of plants by)

INDEX TERM: 463-79-6, Carbonic acid
(esters, growth substances for plants)

INDEX TERM: 10200-98-3, 1-Propanol, 2-butylamino-2-methyl-
(esters, hydrochlorides, growth inhibition of
plants by)

INDEX TERM: 122-88-3, Acetic acid, (p-chlorophenoxy)-
(esters, phenylhydrazide, and piperidide, growth
inhibition of plants by)

INDEX TERM: 6117-91-5, 2-Buten-1-ol
(esters, with halo derivs. of phenoxy acetic acid, growth
inhibition of plants by)

INDEX TERM: 76-39-1, 1-Propanol, 2-methyl-2-nitro- 141-43-5, Ethanol,
2-amino-
(esters, with halo derivs. of phenoxyacetic acid, growth
inhibition of plants by)

INDEX TERM: 14368-49-1, Benzenediazonium, p-nitro- 16278-29-8,
Benzenediazonium, m-nitro-
(fluoroborates, growth inhibition of plants by)

INDEX TERM: 5466-48-8, Acetic acid, (2,4-dichloro-1-naphthyl-
oxy)-
(growth activity of)

INDEX TERM: 131-08-8, 2-Anthraquinonesulfonic acid, sodium salt
(growth control of plants by)

INDEX TERM: 858817-33-1, Acetamide,
N-[1,1-bis(hydroxymethyl)ethyl]-2-(2,4-dichlorophenoxy)-
(growth inhibition of plant by)

INDEX TERM: 860432-82-2, Sulfanilic acid,
2,5-dichloro-N-[(2,4-dichlorophenoxy)acetyl]-, sodium salt
(growth inhibition of plants)

INDEX TERM: 50-73-7, Benzoic acid, 2,3,5-trichloro- 50-84-0, Benzoic
acid, 2,4-dichloro- 51-28-5, Phenol, 2,4-dinitro-
60-09-3, Aniline, p-phenylazo- 62-23-7, Benzoic acid,
p-nitro- 62-53-3, Aniline 62-56-6, Urea, thio-
63-99-0, Urea, m-tolyl- 64-10-8, Urea, phenyl- 67-51-6,
Pyrazole, 3,5-dimethyl- 76-02-8, Acetyl chloride,
trichloro- 76-03-9, Acetic acid, trichloro- 78-40-0,
Triethyl phosphate 79-04-9, Acetyl chloride, chloro-
79-07-2, Acetamide, 2-chloro- 79-17-4, Guanidine, amino-,
cyclic derivative with oxalacetic acid 79-40-3, Oxamide,
dithio- 79-43-6, Acetic acid, dichloro- 80-46-6, Phenol,
p-(1,1-dimethylpropyl)- 81-16-3, 1-Naphthalenesulfonic
acid, 2-amino- 82-45-1, Anthraquinone, 1-amino- 82-75-7,
1-Naphthalenesulfonic acid, 8-amino- 84-86-6, Naphthionic
acid 85-38-1, Salicylic acid, 3-nitro- 86-65-7,
1,3-Naphthalenedisulfonic acid, 7-amino- 87-64-9,
o-Cresol, 6-chloro- 88-50-6, Sulfanilic acid,
2,5-dichloro- 88-65-3, Benzoic acid, o-bromo- 88-67-5,
Benzoic acid, o-iodo- 88-99-3, Phthalic acid 89-25-8,
2-Pyrazolin-5-one, 3-methyl-1-phenyl- 89-55-4, Salicylic
acid, 5-bromo- 90-05-1, Guaiacol 90-20-0,
1-Naphthol-3,6-disulfonic acid, 8-amino- 90-43-7, Phenol,

o-phenyl- 92-67-1, 4-Biphenylamine 92-69-3, Phenol,
 p-phenyl- 94-82-6, Butyric acid, 4-(2,4-dichlorophenoxy)-
 95-48-7, o-Cresol 95-51-2, Aniline, o-chloro- 95-65-8,
 3,4-Xylenol 95-71-6, p-Toluhydroquinone 95-82-9,
 Aniline, 2,5-dichloro- 95-87-4, 2,5-Xylenol 96-50-4,
 Thiazole, 2-amino- 96-97-9, Salicylic acid, 5-nitro-
 97-05-2, Salicylic acid, 5-sulfo- 98-14-6, Benzenearsonic
 acid, p-hydroxy- 98-54-4, Phenol, p-tert-butyl- 98-60-2,
 Benzenesulfonyl chloride, p-chloro- 98-64-6,
 Benzenesulfonamide, p-chloro- 99-33-2, Benzoyl chloride,
 3,5-dinitro- 99-96-7, Benzoic acid, p-hydroxy- 99-99-0,
 Toluene, p-nitro- 100-23-2, Aniline, N,N-dimethyl-p-nitro-
 100-54-9, Nicotinonitrile 102-07-8, Carbanilide
 102-08-9, Carbanilide, thio- 102-12-5, Urea,
 1-(2-hydroxyethyl)-3-phenyl-2-thio- 102-92-1, Cinnamoyl
 chloride 103-01-5, Glycine, N-phenyl- 103-72-0,
 Isothiocyanic acid, phenyl ester 103-85-5, Urea,
 1-phenyl-2-thio- 103-90-2, Acetanilide, 4'-hydroxy-
 104-04-1, Acetanilide, 4'-nitro- 105-67-9, 2,4-Xylenol
 106-41-2, Phenol, p-bromo- 106-44-5, p-Cresol 106-47-8,
 Aniline, p-chloro- 106-54-7, Benzenethiol, p-chloro-
 107-09-5, Ethylamine, 2-bromo- 107-91-5, Acetamide,
 2-cyano- 108-39-4, m-Cresol 108-42-9, Aniline, m-chloro-
 108-46-3, Resorcinol 110-21-4, Biurea 114-38-5, Urea,
 [o-chlorophenyl]- 115-86-6, Phenyl phosphate, (PhO)₃PO
 116-63-2, 2-Naphthol-4-sulfonic acid, 1-amino- 117-79-3,
 Anthraquinone, 2-amino- 119-26-6, Hydrazine,
 (2,4-dinitrophenyl)- 119-68-6, Anthranilic acid, N-methyl-
 120-23-0, Acetic acid, (2-naphthyloxy)- 120-67-2, Ethanol,
 2-(2,4-dichlorophenoxy)- 121-81-3, Benzamide, 3,5-dinitro-
 121-92-6, Benzoic acid, m-nitro- 122-01-0, Benzoyl
 chloride, p-chloro- 122-04-3, Benzoyl chloride, p-nitro-
 122-87-2, Glycine, N-(p-hydroxyphenyl)- 123-08-0,
 Benzaldehyde, p-hydroxy- 123-30-8, Phenol, p-amino-
 123-31-9, Hydroquinone 133-91-5, Salicylic acid,
 3,5-diiodo- 136-35-6, Triazene, 1,3-diphenyl- 140-89-6,
 Xanthic acid, ethyl-, potassium salt 142-08-5, 2-Pyridinol
 148-18-5, Carbamic acid, diethyldithio-, sodium salt
~~149-91-7~~, Gallic acid 150-76-5, Phenol, p-methoxy-
 300-87-8, Isoxazole, 3,5-dimethyl- 320-72-9, Salicylic
 acid, 3,5-dichloro- 321-14-2, Salicylic acid, 5-chloro-
 348-10-7, Acetic acid, (o-fluorophenoxy)- 349-82-6, Acetic
 acid, (α,α,α -trifluoro-m-tolyloxy)-
 403-97-4, m-Acetotoluidide,
 2-(4-chloro-o-tolyloxy)- α,α,α -trifluoro-
 403-98-5, m-Acetotoluidide,
 2-(p-chlorophenoxy)- α,α,α -trifluoro-
 451-88-7, Acetic acid, (4-fluoro-o-tolyloxy)- 483-84-1,
 Flavianic acid 492-86-4, Mandelic acid, p-chloro-
 504-29-0, Pyridine, 2-amino- 521-24-4,
 1-Naphthalenesulfonic acid, 3,4-dihydro-3,4-dioxo-, sodium
 salt 529-21-5, β -Collidine 533-58-4, Phenol,
 o-iodo- 535-15-9, Acetic acid, dichloro-, ethyl ester
 537-45-1, p-Benzoquinone imine, 2,6-dibromo-N-chloro-
 537-47-3, Semicarbazide, 4-phenyl- 541-79-7, Carbamic
 acid, (2,2,2-trichloro-1-hydroxyethyl)-, ethyl ester
 543-54-4, Pyridine, sulfate 544-47-8, Pseudourea,
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 Acetanilide, 3'-chloro-2-(p-chlorophenoxy)- 62095-59-4,
 Acetanilide, 4'-bromo-2-(p-chlorophenoxy)- 62095-62-9,
 p-Acetotoluidide, 2-(p-chlorophenoxy)- 62095-64-1,
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 63867-25-4, Butyronitrile, 4-(2,4-dichlorophenoxy)-
 65051-31-2, Acetic acid, (2,4-dichlorobenzylthio)-
 68715-89-9, 1,3-Propanediol,
 2-(2,4-dinitroanilino)-2-(hydroxymethyl)- 68967-25-9,
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 2,3,5-triiodo- 72214-67-6, Pseudourea,
 2-(2,4-dichlorobenzyl)-2-thio-, hydrochloride 72757-96-1,
 Carbanilic acid, p-nitrodithio-, ammonium salt 74815-20-6,
 3(2H)-Benzofuranone, 5,7-dichloro- 75004-50-1,
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 [4-bromo-2-chlorophenoxy]- 77851-23-1, Urea, naphthyl-
 79979-69-4, 1-Naphthoic acid, 2-amino- 81294-21-5,
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 oxime 82473-57-2, Ethylene glycol,
 (4-chloro-o-toloxo)acetate (mono-) 83479-80-5, Sulfamic
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 acid, (2,4-dichloro-5-nitrophenoxy)- 84794-72-9, Acetic
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 92435-95-5, p-Acetotoluidide, 2-(2,4-dichlorophenoxy)-
 93535-08-1, Acetanilide, 2-(p-chlorophenylthio)-

93696-65-2, Hydrocinnamoyl chloride, α,β -dibromo-
 93869-73-9, Acetamide, 2-(2,4-dichlorophenoxy)-N-1-naphthyl-
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 2-chloroethyl ester 99277-71-1, Benzoic acid,
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 diphenyl-, 2-methyl-2-pentylaminopropyl ester, hydrochloride
 854879-29-1, Cinnamic acid, p-chloro-, ammonium salt
 854910-27-3, Carbanilide, 3-chloro-2,4-dimethyl-
 855152-81-7, Butyric acid, 2-(2,4-dichlorophenoxy)-,
 ammonium salt 855412-89-4, Phenol, o-iodo-, carbanilate
 855415-78-0, Phenol, p-methoxy-, 1-naphthalenecarbamate
 855470-14-3, Benzoic acid, p-(hexyloxy)-,
 2-butylamino-2-methylpropyl ester, hydrochloride
 855470-14-3, Benzoic acid, p-(hexyloxy)-,
 2-butylamino-2-methylpropyl ester, hydrochloride
 855471-36-2, o-Anisic acid, α -carboxy-3,5-dichloro-
 855634-66-1, Lactic acid, isopropyl ester,
 1-naphthalenecarbamate 855888-41-4, Guanidine,
 [2-(2,4-dichlorophenoxy)acetamido]- 855888-41-4, Acetic
 acid, (2,4-dichlorophenoxy)-, 2-amidinohydrazide
 855888-41-4, Acetamide, 2-(2,4-dichlorophenoxy)-N-guanidino-
 855927-81-0, Acetamide,
 N-[1,1-bis(hydroxymethyl)propyl]-2-(2,4-dichlorophenoxy)-
 855928-90-4, Acetanilide, 2-(2-biphenylyloxy)-3'-phenyl-
 855932-60-4, Acetanilide,
 4'-phenylazo-2-(2,4,5-trichlorophenoxy)- 855932-87-5,

Acetic acid, diphenyl-, 2-butylaminoethyl ester,
 hydrochloride 855938-32-8, Acetyl chloride,
 (6-chloro-o-tolyloxy)- 856065-05-9, Naphthionic acid,
 N-(2,4-xylyloxyacetyl)- 856077-50-4, 2-Naphthoic acid,
 3-isopropoxy- 856077-84-4, 2-Naphthoic acid, 3-propyl-
 856187-93-4, Mercury chloride, HgCl₂, compound with
 2,5-dichloroaniline 856187-93-4, Aniline, 2,5-dichloro-,
 compound with HgCl₂ 856188-04-0, Mercury chloride, HgCl₂,
 compound with BuNH₂ 856189-54-3, Acetic acid,
 [p-(chloromercuri)phenoxy]- 856189-54-3, Mercury,
 [p-(carboxymethoxy)phenyl]-, chloride 856196-86-6,
 1,3-Naphthalenedisulfonic acid,
 7-[2-(4-chloro-o-tolyloxy)acetamido]- 856375-14-9,
 Ethanol, 2-ethylamino-, diphenylacetate, hydrochloride
 856375-14-9, Acetic acid, diphenyl-, 2-ethylaminoethyl
 ester, hydrochloride 856818-13-8, 1-Propanol,
 2-methyl-2-propylamino-, p-(heptyloxy)benzoate,
 hydrochloride 856837-76-8, Picric acid, carbamate
 857005-43-7, p-Toluhydroquinone, di-1-naphthalenecarbamate
 857230-61-6, Propionamide, 2-amino-3-(2,4-dichlorophenoxy)-
 857233-22-8, 1-Propanol, 2-hexylamino-2-methyl-,
 p-ethoxybenzoate, hydrochloride 857236-06-7,
 1,3-Propanediol, 2-[benzyl[2-hydroxy-3-[[2-hydroxy-1,1-
 bis(hydroxymethyl)ethyl]amino]propyl]amino]-2-
 (hydroxymethyl)- 857236-06-7, 2-Propanol,
 1-[benzyl[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]amino]-3-[[2-
 hydroxy-1,1-bis(hydroxymethyl)ethyl]amino]- 857534-29-3,
 Benzanilide, 2,2'-dibromo-3,5-dichloro- 857534-53-3,
 Benzanilide, 2-bromo-3,3',5-trichloro- 857537-48-5,
 Benzoic acid, 3,5-dibromo-4-hydroxy-, carbanilate
 857538-83-1, Benzoic acid, p-hydroxy-, carbanilate
 857556-10-6, Acetic acid, diphenyl-, 2-butylaminoisobutyl
 ester, hydrochloride 857568-90-2, m-Acetotoluidide,
 2-[6-chloro-o-tolyloxy]- 857569-68-7, p-Acetotoluidide,
 2-(6-chloro-o-tolyloxy)- 857570-53-7, Acetyl bromide,
 (2,4-dichlorophenoxy)- 857599-60-1, o-Anisic acid,
 α-carboxy-3-methyl-5-nitro-, carboxymethyl ester
 857599-60-1, Glycolic acid,
 α-carboxy-3-methyl-5-nitro-o-anisate 857599-65-6,
 o-Anisic acid, α-carboxy-, carboxymethyl ester
 857599-65-6, Glycolic acid, α-carboxy-o-anisate
 857599-95-2, p-Anisic acid, 2-butylaminoethyl ester,
 hydrochloride 857602-97-2, Anthraquinone,
 2-[2-(2-biphenylyloxy)acetamido]- 857641-33-9, Aniline,
 p-chloro-, fluoborate 857943-96-5, Acetamide,
 2-(2,4-dichlorophenoxy)-N-[2-hydroxy-1,1-
 bis(hydroxymethyl)ethyl]- 857949-00-9, Acetanilide,
 2',5'-dichloro-2-(6-chloro-o-tolyloxy)- 857949-73-6,
 Acetanilide, 2-(4,6-dichloro-o-tolyloxy)- 857949-80-5,
 Acetanilide, 2',5'-dichloro-2-(2-methoxy-p-tolyloxy)-
 857953-58-3, Acetanilide, N-2-naphthyl-2-(2,4-xylyloxy)-
 858030-92-9, 2-Naphthol-7-sulfonic acid, carbanilate, sodium
 salt 858197-05-4, Mercury,
 (5-chloro-2-hydroxy-4-biphenyl)-, hydroxide 858197-05-4,
 Phenol, 4-chloro-5-(hydroxymethyl)-2-phenyl- 858200-46-1,
 1,3-Naphthalenedisulfonic acid,
 7-[2-(2,4-dichlorophenoxy)acetamido]- 858201-43-1,
 1-Naphthalenesulfonic acid,
 8-[2-(2,4-dichlorophenoxy)acetamido]- 858440-57-0,

4-Morpholine ethanol, β,β -bis(hydroxymethyl)-, hydrochloride 858440-57-0, 1,3-Propanediol, 2-(hydroxymethyl)-2-morpholino-, hydrochloride 858465-03-9, 1-Naphthalenesulfonic acid, 8-[2-(4-chloro-o-tolyloxy)acetamido]- 858465-05-1, 1-Naphthalenesulfonic acid, 2-[2-(4-chloro-o-tolyloxy)acetamido]- 858465-07-3, 1-Naphthalenesulfonic acid, 8-[2-(p-chlorophenoxy)acetamido]- 858465-83-5, 1-Naphthalenesulfonic acid, [2-(2,4,6-trichlorophenoxy)acetamido]- 858479-83-1, Semicarbazide, 1-[(2,4-dichlorophenoxy)acetyl]-1-phenyl- 858817-59-1, Acetamide, N-butyl-2-(4,6-dichloro-o-tolyloxy)- 858818-30-1, Acetamide, 2-(p-chlorophenoxy)-N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]-N-[2-hydroxy-3-[2-hydroxy-1,1-bis(hydroxymethyl)ethylamino]propyl]-, hydrochloride 858818-74-3, Acetamide, 2-(4-chloro-o-tolyloxy)-N,N-bis(2-hydroxyethyl)- 859053-22-8, 1,3-Propanediol, 2,2'-(2-aminoethylimino)bis[2-(hydroxymethyl)-, dihydrochloride 859053-65-9, 1,3-Propanediol, 2-(2,3-dibromopropylamino)-2-methoxy-, hydrobromide 859054-09-4, 1,3-Propanediol, 2,2'-(hexamethylenediimino)bis[2-(hydroxymethyl)-, dihydrochloride 859061-06-6, Pseudourea, 2-[(2,4-dichlorophenoxy)acetyl]-2-thio- 859326-46-8, Urea, 1-(6-amino-2-pyridyl)-3-phenyl- 859733-19-0, Urea, 1,1-bis(2,2,2-trichloro-1-hydroxyethyl)- 859781-57-0, 2,4-Xylenol, 1-naphthalenecarbamate 859996-47-7, Nicotinonitrile, 5-ethyl-2,6-dihydroxy-4-methyl-, dicarbanilate 860364-55-2, 1-Naphthol-3,6-disulfonic acid, 8-[2-(p-chlorophenoxy)acetamido]- 860433-04-1, Sulfanilic acid, N-p-nitrobenzoyl-, potassium salt 860507-42-2, Salicylic acid, 1-naphthalenecarbamate 860695-83-6, Benzoic acid, o-butoxy-, 2-isopropylaminoethyl ester, hydrochloride 860696-02-2, Benzoic acid, o-(butylthio)-, 2-butylaminoethyl ester 860697-61-6, Benzoic acid, p-[1-(o-chlorophenyl)ureido]- 860699-32-7, Benzoic acid, p-pentyloxy-, 2-butylamino-2-methylpropyl ester, hydrochloride 860701-92-4, Betaine hydrazide, N1-(2,4-dichlorophenoxyacetyl)- 861057-15-0, Acetamide, N,N-diphenyl-2-(2,4,5-trichlorophenylthio)- 861058-16-4, Acetamide, N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]-2-(2,4,5-trichlorophenoxy)- 861058-18-6, Acetamide, N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]-N-[2-hydroxy-3-[[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]amino]propyl]-2-(2,4,5-trichlorophenoxy)-, hydrochloride 861058-27-7, Acetamide, N-2-hydroxyethyl-2-(2,4,5-trichlorophenylthio)- 861058-92-6, Acetamide, N,N'-m-phenylenebis[2-(2,4,5-trichlorophenoxy)- 861065-42-1, Acetic acid, (p-dithiocarboxyaminophenyl)-, sodium salt 861065-76-1, Acetic acid, diphenyl-, 2-pentylaminoethyl ester, hydrochloride 861066-09-3, Acetic acid, (1-naphthylloxy)-, ammonium salt 861066-48-0, Acetic acid, (5-nitro-2-pyridylloxy)- 861067-14-3, Acetic acid, (2,4,5-trichlorophenylthio)-, ethyl ester 872306-95-1, Heptanoic acid, 2-(4-chloro-o-tolyloxy)-, ethyl ester 872306-96-2, Heptanoic acid, 2-(p-chlorophenoxy)- 872799-52-5, 1-Naphthol-3,6-disulfonic acid,

8-[2-(2,4-dichlorophenoxy)acetamido]- 873396-39-5,
 1,3-Propanediol, 2-(hydroxymethyl)-2-(p-nitrobenzylamino)-
 873990-90-0, o-Anisic acid,
 α -carboxy-5-chloro-3-methyl- 874006-20-9, Glycolic
 acid, 5-bromo-2-(carboxymethoxy)-m-toluate 874006-20-9,
 Glycolic acid, 5-bromo-2-(carboxymethoxy)-m-toluate
 874006-92-5, Heptanoic acid, 2-(4-chloro-o-tolyloxy)-
 874006-93-6, Heptanoic acid, 2-(p-chlorophenoxy)-, ethyl
 ester 874506-02-2, Sulfanilic acid,
 N-[(2,4,6-trichlorophenoxy)acetyl]- 874506-02-2,
 Sulfanilic acid, N-[(2,4,6-trichlorophenoxy)acetyl]-
 875245-95-7, o-Anisic acid,
 5-bromo- α -carboxy-3-methyl- 875247-30-6, Heptanoic
 acid, 2-(2,4-dichlorophenoxy)- 875248-61-6, Hydroquinone,
 bis(1-naphthalenecarbamate) 875248-61-6, Hydroquinone,
 bis(1-naphthalenecarbamate) 875257-87-7, Acetamide,
 N,N'-p-phenylenebis[2-(2,4,5-trichlorophenoxy)-
 875816-27-6, Acetic acid, (2-sec-butyl-4-chlorophenoxy)-,
 ethyl ester 875817-47-3, Acetic acid,
 [4-chloro-2-(2,3-dichloropropyl)phenoxy]- 875820-90-9,
 Acetamide, N,N-diphenyl-2-(2,4,5-trichlorophenoxy)-
 875820-90-9, Acetamide,
 N,N-diphenyl-2-(2,4,5-trichlorophenoxy)- 878762-59-5,
 Ethanol, 2-isobutylamino-, p-butoxybenzoate, hydrochloride
 878762-59-5, Ethanol, 2-isobutylamino-, p-butoxybenzoate,
 hydrochloride 902273-44-3, Fumaric acid,
 (4-chloro-o-tolyloxy)-
 (growth inhibition of plants by)
 INDEX TERM: 847643-09-8, Carbanilic acid, p-(carboxymethyl)dithio-,
 sodium salt 855935-12-5, Acetanilide,
 2',4',6'-trichloro-2-(p-chlorophenoxy)-
 (growth inhibition of plants, by)
 INDEX TERM: 643-43-6, Acetic acid, (2,4-dinitrophenyl)-
 (growth substance activity of)
 INDEX TERM: 66-22-8, Uracil
 (growth-inhibiting effect on plants)
 INDEX TERM: 109-56-8, Ethanol, 2-isopropylamino-, butoxybenzoates
 (hydrochlorides, growth inhibition of plants
 by)
 INDEX TERM: 68-35-9, Sulfadiazine 74-11-3, Benzoic acid, p-chloro-
 121-57-3, Sulfanilic acid
 (plant growth inhibition by)
 INDEX TERM: 553-82-2, Anisole, 2,4-dichloro-
 (plant growth-regulating effect of)
 INDEX TERM: 51-79-6, Carbamic acid, ethyl ester 57-67-0,
 Sulfaguanidine 127-79-7, Sulfamerazine 144-83-2,
 Sulfapyridine 7163-25-9, 2-Naphthoic acid, 3-hydroxy-,
 ethyl ester
 (plant-growth inhibition by)
 INDEX TERM: 776-75-0, Benzoic acid, piperidide
 (plant-growth-inhibition by)
 INDEX TERM: 7145-91-7P, 1,3-Propanediol,
 2,2'-[(2-hydroxytrimethylene)diimino]bis[2-(hydroxymethyl)-,
 dihydrochloride 146903-27-7P, Acetamide,
 N,N'-p-phenylenebis[2-(p-chlorophenoxy)- 162086-24-0P,
 Acetamide, N,N'-m-phenylenebis[2-(p-chlorophenoxy)-
 872287-85-9P, 2,5-Cyclohexadien-1-one,
 4-methyl-4-(trichloromethyl)-, O-(carboxymethyl)oxime
 872287-85-9P, Hydroxylamine,
 O-(carboxymethyl)-N-[4-methyl-4-(trichloromethyl)-2,5-

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cyclohexadien-1-ylidene]- 872287-85-9P, Acetic acid,
[4-methyl-4-(trichloromethyl)-2,5-cyclohexadien-1-
ylideneamino-oxy]-
ROLE: PREP (Preparation)

(preparation of)
INDEX TERM: 63-74-1, Sulfanilamide
(toxicity of, to plants)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4
CITINGS)

DATE LAST CITED: Date last citing reference entered STN: 16 Feb 2009

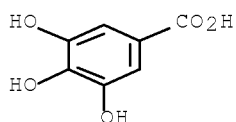
OS.CITING.REFS: CAPLUS 2006:908710; 2005:479312; 2000:148019; 1997:698412

IT 149-91-7, Gallic acid

(growth inhibition of plants by)

RN 149-91-7 ZCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy- (CA INDEX NAME)



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=> d his full

(FILE 'HOME' ENTERED AT 09:34:49 ON 28 AUG 2009)

FILE 'REGISTRY' ENTERED AT 09:34:56 ON 28 AUG 2009

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 50 SEA SSS SAM L1 AND L2
 D STAT QUE
L4 0 SEA SSS SAM L2
L5 6619 SEA SSS FUL L1 AND L2
 SAVE TEMP L5 BRO211L1L2/A

FILE 'ZCAPLUS' ENTERED AT 09:44:03 ON 28 AUG 2009

L6 26435 SEA SPE=ON ABB=ON PLU=ON L5
 E US2004-810211 /APPS
L7 1 SEA SPE=ON ABB=ON PLU=ON US2004-810211 /AP
 D SCA
 SEL RN

FILE 'REGISTRY' ENTERED AT 09:46:38 ON 28 AUG 2009

L8 4 SEA SPE=ON ABB=ON PLU=ON (1132-21-4/BI OR 141112-29-0/BI OR
 173159-57-4/BI OR 530-57-4/BI)
 D SCA
L9 1 SEA SPE=ON ABB=ON PLU=ON 141112-29-0
L10 1 SEA SPE=ON ABB=ON PLU=ON 173159-57-4
L11 2 SEA SPE=ON ABB=ON PLU=ON (L9 OR L10)

FILE 'ZCAPLUS' ENTERED AT 09:49:52 ON 28 AUG 2009

E HERBICIDE ANTIDOTES+ALL/CT
E E7+ALL/CT

L12 1573854 SEA SPE=ON ABB=ON PLU=ON ?PLANT?/BI
L13 374345 SEA SPE=ON ABB=ON PLU=ON ?SEED?/BI
L14 222949 SEA SPE=ON ABB=ON PLU=ON ?PROPAGAT?/BI
L15 95842 SEA SPE=ON ABB=ON PLU=ON ?HERBICID?/BI
L16 610849 SEA SPE=ON ABB=ON PLU=ON ?ICID?/BI
L17 13955 SEA SPE=ON ABB=ON PLU=ON ?BIOCID?/BI
L18 67493 SEA SPE=ON ABB=ON PLU=ON AGRO?/BI
L19 99601 SEA SPE=ON ABB=ON PLU=ON AGRI?/BI
L20 959 SEA SPE=ON ABB=ON PLU=ON ?SAFENER?/BI
L21 63339 SEA SPE=ON ABB=ON PLU=ON ?ADJUVANT?/BI
L22 7342 SEA SPE=ON ABB=ON PLU=ON ?ANTIDOTE?/BI
L23 353363 SEA SPE=ON ABB=ON PLU=ON 5/CC, SX, SC
L24 462 SEA SPE=ON ABB=ON PLU=ON L11
L25 298 SEA SPE=ON ABB=ON PLU=ON ?PHYTOCID?/BI
L26 25907 SEA SPE=ON ABB=ON PLU=ON WEED CONTROL?/BI
L27 268 SEA SPE=ON ABB=ON PLU=ON WEEDICID?/BI
L28 2 SEA SPE=ON ABB=ON PLU=ON L6 AND L20
L29 125 SEA SPE=ON ABB=ON PLU=ON L6 AND L21
L30 15 SEA SPE=ON ABB=ON PLU=ON L6 AND L22
 D SCA
L31 3 SEA SPE=ON ABB=ON PLU=ON L30 AND L23
 D SCA L28
L32 5730 SEA SPE=ON ABB=ON PLU=ON L6 AND ((L12 OR L13 OR L14 OR L15
 OR L16 OR L17 OR L18 OR L19) OR L21 OR (L23 OR L24 OR L25 OR
 L26 OR L27))
L33 1295 SEA SPE=ON ABB=ON PLU=ON L32 AND P/DT
L34 4435 SEA SPE=ON ABB=ON PLU=ON L32 NOT L33

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L35 2914 SEA SPE=ON ABB=ON PLU=ON L34 AND PY<2004
L*** DEL 2709 S L34 AND PY<2003
L36 635 SEA SPE=ON ABB=ON PLU=ON L33 AND PRD<20030326
L37 620 SEA SPE=ON ABB=ON PLU=ON L33 AND AD<20030326
L38 541 SEA SPE=ON ABB=ON PLU=ON L33 AND PD<20030326
L39 3584 SEA SPE=ON ABB=ON PLU=ON (L35 OR L36 OR L37 OR L38)
L40 56 SEA SPE=ON ABB=ON PLU=ON L39 AND L15

FILE 'REGISTRY' ENTERED AT 10:07:45 ON 28 AUG 2009

D SCA L9
D SCA L8
L41 1 SEA SPE=ON ABB=ON PLU=ON L8 AND 5/O
D SCA
D IDE

FILE 'ZCAPLUS' ENTERED AT 10:09:09 ON 28 AUG 2009

L42 675 SEA SPE=ON ABB=ON PLU=ON L41 AND L39
L43 136 SEA SPE=ON ABB=ON PLU=ON L5 (L) AGR/RL
L44 95 SEA SPE=ON ABB=ON PLU=ON L43 AND P/DT
L45 41 SEA SPE=ON ABB=ON PLU=ON L43 NOT L44
L46 20 SEA SPE=ON ABB=ON PLU=ON L45 AND PY<2004
L47 41 SEA SPE=ON ABB=ON PLU=ON L44 AND PRD<20030326
L48 30 SEA SPE=ON ABB=ON PLU=ON L44 AND PD<20030326
L49 41 SEA SPE=ON ABB=ON PLU=ON L44 AND AD<20030326
L50 61 SEA SPE=ON ABB=ON PLU=ON (L46 OR L47 OR L48 OR L49)
L51 3586 SEA SPE=ON ABB=ON PLU=ON L50 OR L39
L52 675 SEA SPE=ON ABB=ON PLU=ON L51 AND L41
L53 12 SEA SPE=ON ABB=ON PLU=ON L50 AND L41
L54 2709 SEA SPE=ON ABB=ON PLU=ON L34 AND PY<2003
L55 3379 SEA SPE=ON ABB=ON PLU=ON L54 OR (L36 OR L37 OR L38)
L56 17 SEA SPE=ON ABB=ON PLU=ON L45 AND PY<2003
L57 58 SEA SPE=ON ABB=ON PLU=ON L56 OR (L47 OR L48 OR L49)
L58 3381 SEA SPE=ON ABB=ON PLU=ON L55 OR L57
L59 12 SEA SPE=ON ABB=ON PLU=ON L58 AND (L41 (L) AGR/RL)
L60 10 SEA SPE=ON ABB=ON PLU=ON L59 AND L23
L*** DEL 0 S L60 NOT L59
L61 2 SEA SPE=ON ABB=ON PLU=ON L59 NOT L60
D SCA
E CEREAL+ALL/CT
E E2+ALL/CT
L62 39073 SEA SPE=ON ABB=ON PLU=ON ZEA MAYS?/BI
L63 31320 SEA SPE=ON ABB=ON PLU=ON TRITICUM AESTIVUM/BI
L64 18095 SEA SPE=ON ABB=ON PLU=ON SORGHUM/BI
L65 4291 SEA SPE=ON ABB=ON PLU=ON SECALE CEREALE/BI
L66 5269 SEA SPE=ON ABB=ON PLU=ON PANICUM/BI
L67 16049 SEA SPE=ON ABB=ON PLU=ON HORDEUM VULGARE/BI
L68 2362 SEA SPE=ON ABB=ON PLU=ON FAGOPYRUM ESCULENTUM/BI
L69 47260 SEA SPE=ON ABB=ON PLU=ON CEREAL?/BI
L70 57166 SEA SPE=ON ABB=ON PLU=ON BARLEY?/BI
L71 24491 SEA SPE=ON ABB=ON PLU=ON BRAN/BI
L72 143166 SEA SPE=ON ABB=ON PLU=ON CORN/BI
L73 45485 SEA SPE=ON ABB=ON PLU=ON ORYZA SATIVA/BI
L74 118899 SEA SPE=ON ABB=ON PLU=ON RICE/BI
L75 130626 SEA SPE=ON ABB=ON PLU=ON COTTON/BI
L76 139287 SEA SPE=ON ABB=ON PLU=ON SOYBEAN?/BI
L77 390 SEA SPE=ON ABB=ON PLU=ON L58 AND (L62 OR L63 OR L64 OR L65
OR L66 OR L67 OR L68 OR L69 OR L70 OR L71 OR L72 OR L73 OR L74
OR L75 OR L76)
L78 123 SEA SPE=ON ABB=ON PLU=ON L41 AND L77
L79 300 SEA SPE=ON ABB=ON PLU=ON L41 (L) USES/RL

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L80	8	SEA SPE=ON	ABB=ON	PLU=ON	L77 AND L79
		D SCA			
L81	2	SEA SPE=ON	ABB=ON	PLU=ON	L80 AND L23
L82	3	SEA SPE=ON	ABB=ON	PLU=ON	L80 AND 3/CC
L83	9058	SEA SPE=ON	ABB=ON	PLU=ON	L5 (L) USES/RL
L84	89	SEA SPE=ON	ABB=ON	PLU=ON	L83 AND L77
L85	10	SEA SPE=ON	ABB=ON	PLU=ON	L84 AND L23
		D SCA			
L86	5	SEA SPE=ON	ABB=ON	PLU=ON	L77 AND (L26 OR L27)
		D SCA			
L87	1	SEA SPE=ON	ABB=ON	PLU=ON	L86 AND NEW GROWTH/II
L88	7	SEA SPE=ON	ABB=ON	PLU=ON	L5 (L) L21
L89	2	SEA SPE=ON	ABB=ON	PLU=ON	L88 AND L58
		D SCA			
L90	33	SEA SPE=ON	ABB=ON	PLU=ON	L58 AND L21
L91	0	SEA SPE=ON	ABB=ON	PLU=ON	L90 AND L23

FILE 'REGISTRY' ENTERED AT 11:05:21 ON 28 AUG 2009

FILE 'ZCAPLUS' ENTERED AT 11:05:23 ON 28 AUG 2009

		D STAT QUE L28			
		D STAT QUE L31			
		D STAT QUE L59			
		D STAT QUE L81			
		D STAT QUE L82			
		D STAT QUE L85			
		D STAT QUE L87			
L92	27	SEA SPE=ON	ABB=ON	PLU=ON	L28 OR L31 OR L59 OR L81 OR L82 OR
		L85 OR L87			
		D IALL HITSTR L92 1-27			

FILE HOME

FILE REGISTRY

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REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

ZCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

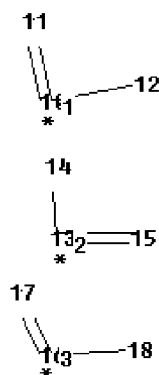
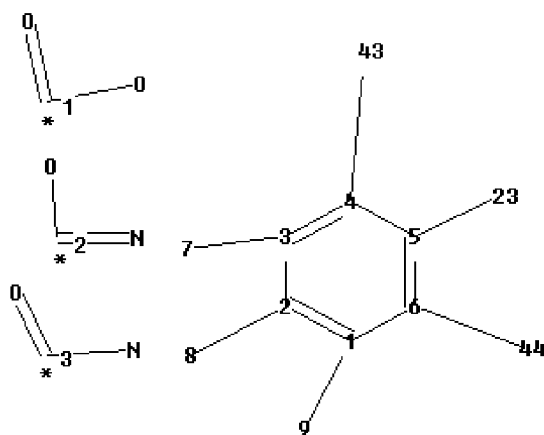
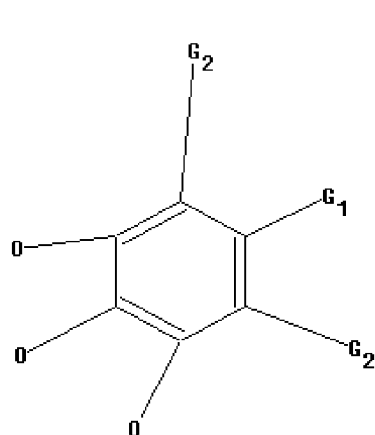
<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAPplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.

Uploading L1.str

10/810211



10/810211

1-2 1-6 2-3 3-4 4-5 5-6

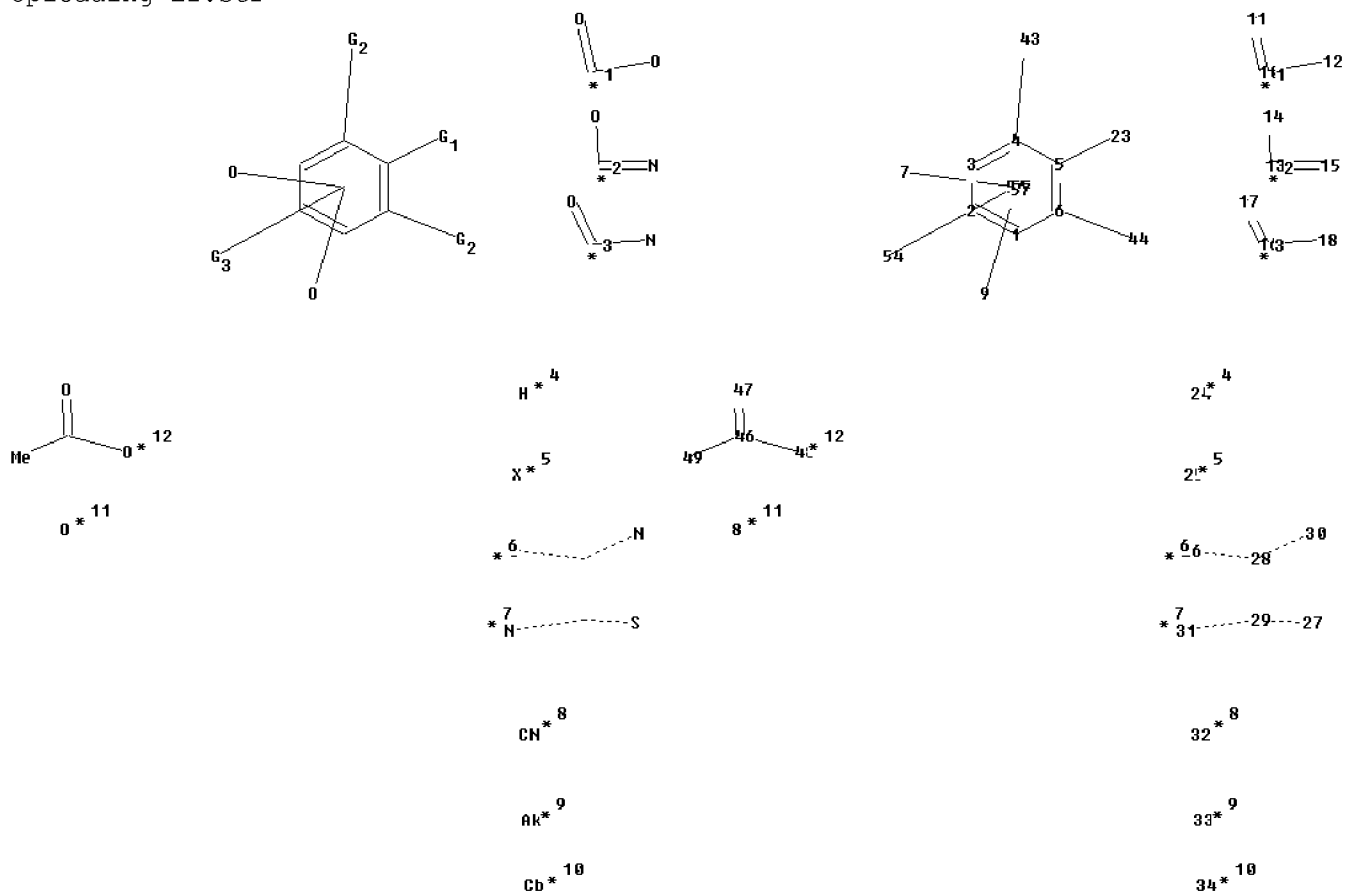
G1:[*1],[*2],[*3]

G2:[*4],[*5],[*6],[*7],[*8],[*9],[*10]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
23:CLASS 24:CLASS
25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 34:Atom
43:CLASS 44:CLASS

Uploading L2.str



chain nodes :

7 8 9 10 11 12 13 14 15 16 17 18 23 24 25 26 27 28 29 30 31
32 33 34 43 44 46 47 48 49 54

ring nodes :

1 2 3 4 5 6

chain bonds :

4-43 5-23 6-44 10-11 10-12 13-14 13-15 16-17 16-18 26-28 27-29 28-30
29-31 46-47 46-48 46-49

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds :

10/810211

4-43 5-23 6-44 10-11 10-12 13-14 13-15 16-17 16-18 26-28 27-29 28-30
29-31 46-47 46-48
exact bonds :
46-49
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

G1:[*1],[*2],[*3]

G2:[*4],[*5],[*6],[*7],[*8],[*9],[*10]

G3:[*11],[*12]

Connectivity :

8:1 E exact RC ring/chain

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
23:CLASS 24:CLASS
25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS
33:CLASS 34:Atom
43:CLASS 44:CLASS 46:CLASS 47:CLASS 48:CLASS 49:CLASS 54:CLASS 55:CLASS
56:CLASS 57:CLASS

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